



A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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CALUMET ELEVATOR B AT SOUTH CHICAGO.

The completion of the seventh large elevator on the banks of the Calumet River in South Chicago marks the exodus of another part of Chicago's grain trade from the banks of the Chicago River. The river is so congested and shallow it seems certain that the time is not far distant when very little of Chicago's grain traffic will be handled over it. The opening of the drainage canal will materially increase its current and interfere with the handling of grain laden boats.

The Calumet River now has a 17-foot channel, and will soon have a 20-foot channel, so that vessels will be able to take much larger cargoes from that river, hence will be able to take them at a lower rate. Only one bridge now crosses the Calumet River below the elevators, and as its banks are reserved for docks it is not likely that other bridges will be erected. Very little, if any, of the grain handled by the storage elevators on the banks of the Chicago River is consumed in the city. It is shipped out by water or rail. Nothing is gained, but an extra expense is incurred by bringing it to the heart of the city.

The last addition to the list of South Chicago elevators is elevator B of the Calumet Elevator Company, which is illustrated herewith. The house B is about 300 feet east of elevator A, which is owned and operated by the same company. Elevator B is 170x156 feet, cribbed and covered with corrugated iron. It is a regular house and has a capacity of 1,000,000 bushels. In the storage part, which is 120x170 feet, the 64 bins extend down to within a few feet of the ground, and their floors slant toward one of 4 passageways in which runs a 36-inch rubber conveyor belt. In this part are eight rows of bins and eight bins in each row. These bins, with the exception of the four loading bins on the water side, have 12,000 to 13,000 bushels' capacity each. Below these four

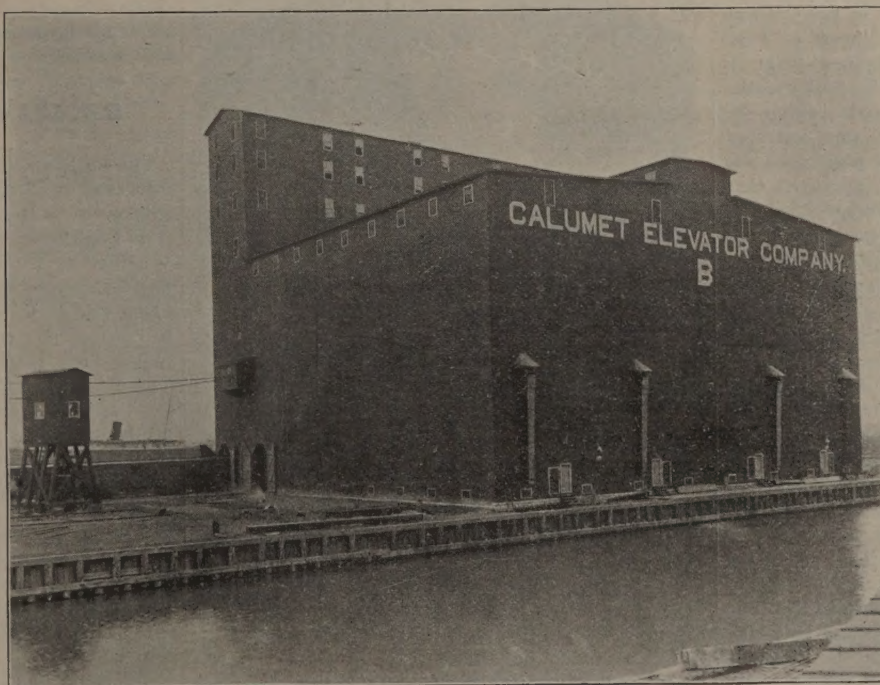
loading bins are four small bins. The elevator has but four conveyor belts. Each belt carries grain into 16 bins at the top and out from them at the bottom, thus running around the bins. It is claimed that the single belt can be run with less power than is required to run two belts, one at top and the other at the bottom. The part of the belt running down will balance the part running up, so no power, or at least, very little, will be required

vator head is seven feet in diameter. Four double sets of Clark's Power Shovels are provided for unloading cars, and four bifurcated spouts for loading.

Above the tracks in the working part are 32 bins, and on the first floor above the bins are four turn heads delivering to four pockets on bin floor. Above these are four other turn heads which receive grain from the scale hoppers, and deliver to any one of nine spouts. On the scale floor are four 1,000-bushel hopper scales, equipped with automatic check beams, also the public weighman's office. On the garner floor are four garnerers of 1,000 bushels' capacity.

The bins have lapped bottoms, so that the settling of the house will not injure them, and the stairways are built independent of the rest of the house, for the same reason. The elevator is lighted by incandescent electric lights. On each floor are barrels of salt water and buckets, also a 5-inch standpipe with 50 feet of hose attached at convenient points. Drip cups are provided for all journal boxes, and a sincere effort is made to diminish the fire hazard.

Power is supplied from the power plant of elevator A, it being transmitted by a rope drive, which is shown in the illustration. The house for the idlers and vertical tension carriages is about half way between the two elevators. The dock is



CALUMET ELEVATOR B AT SOUTH CHICAGO.

to run idle parts. The horizontal parts above and below can be kept at work. The lower part of each belt conveys grain from the bins to one of the receiving sinks which supplies grain to the elevator that delivers to the same conveyor belt at the top of the house.

Two tracks run through the house, and between them are four elevator legs with an elevating capacity of 10,000 bushels each per hour. Each leg has two receiving sinks, and each can be used as a receiving or shipping leg. The elevators are driven by ropes from a line shaft, and each can be cut off by a friction clutch, which can be operated from the lower floor. The pulley on each ele-

vator is lighted by arc lights. Beams have been provided for the construction of a marine leg.

The elevator was erected by Honstain Bros., and the machinery was supplied by the Webster Mfg. Co.

Under the supervision of Mr. J. D. Sayre the elevator has made a good record for rapid handling. It has unloaded 102,000 bushels in 9 hours and 10 minutes, with only 12 men in the house. Mr. Sayre, who is superintendent of both elevators, has been connected with the large terminal elevators of Chicago for nearly a quarter of a century. He was with P. B. Weare & Co. for nearly 23 years, and had charge of the Iowa and Union before going to

South Chicago, where he has been very successful in handling this new plant.

VALIDITY OF FUTURE CONTRACTS.

Among the cases recently decided by the Supreme Court of the United States was one involving the validity of contracts for futures. This case (Hansen vs. Boyd et al.) arose upon an action instituted by the defendants in error to recover from the plaintiff in error the amount of payments alleged to have been made between August 24, 1888, and June 8, 1889, on account of the purchase and sale of grain made for the plaintiff in error in the city of Chicago, and also the value of services rendered in connection therewith. It appeared that the defendants in error were partners in business in Chicago, doing business as commission merchants on the Board of Trade of that city, and having a branch office in Minneapolis. The plaintiff in error was engaged in the general merchandise and grain business at Benson, Minn., where he owned and operated a grain elevator and warehouse, and, prior to his transactions with the defendants in error, he had sold wheat through brokers on the Board of Trade at Chicago and the Chamber of Commerce at Minneapolis, had had some option deals, and was generally familiar with the manner in which business was done on those boards.

In August, 1888, the plaintiff in error called at the office of the Chicago firm's agent at Minneapolis and gave him an order for the purchase of 5,000 bushels of December wheat. He testified that he supposed the transactions were to be conducted for him on the Chicago Board of Trade, but claimed that no allusion was made to the rules of the Board of Trade. He also testified that it was not his intention to buy or sell any grain on any of the orders given, but that he contemplated mere speculations on margins. The agent of the Chicago firm, however, testified that when the first order was given he told the plaintiff in error that he would have to abide by the rules of the Chicago Board of Trade; that he informed him as to what those rules were concerning the handling of grain on that Board, and also informed him that a delivery was contemplated in every trade, either by buyer or seller; that in case wheat was delivered he must take care of it and pay the purchase price and interest on the money, etc. It appeared that in none of the transactions was wheat offered or furnished by Hansen or to him personally, but the purchases and sales were all made on the Chicago Board of Trade, according to the rules of that Board.

The plaintiff in error became delinquent in the furnishing of margins on his contract, and in April, 1889, the defendants in error sold 40,000 bushels of May wheat which had been bought on his account, and charged up against him a loss of \$11,500. The Chicago firm had asked him for authority to "transfer" the May wheat to June wheat, and not hearing from him to their satisfaction, bought 40,000 bushels of June wheat, sending him a memorandum thereof and an account of the loss on the May wheat, with a request for an immediate settlement. On June 8, 1889, the firm closed out the June wheat at a loss. Upon his refusal to pay suit was brought. The plaintiff in error set up the illegality of the transaction, alleging that the orders given by him were mere wagers on the price of wheat, while the defendants in error contended that the transactions were bona fide purchases and sales of wheat under the rules of the Board of Trade. The defendants in error recovered judgment for the full amount claimed.

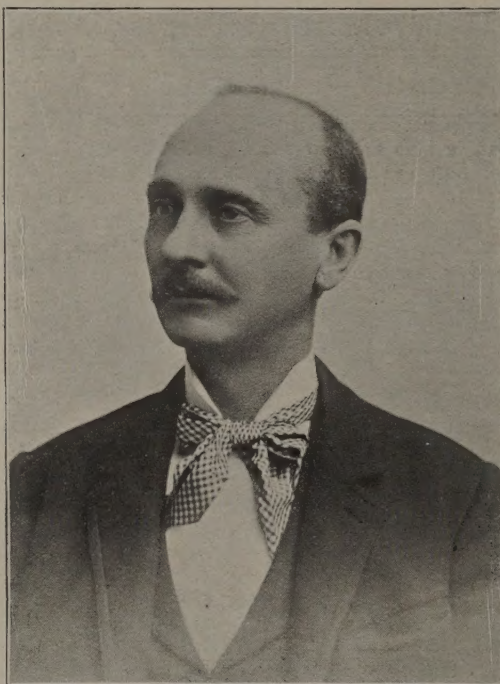
The Supreme Court of the United States has rendered a decision in which it refuses to disturb this judgment, except in one particular. The judge in the trial court ruled, in effect, that if the jury found that the plaintiff in error made no objection to the action of the defendants in error in "transferring" the May to June wheat, he must be held to have ratified their acts. The Supreme Court ruled to the contrary, and ordered that if a remittitur, or the amount depending on that part

of the transaction, should be filed, the judgment as to the rest should be affirmed, but that otherwise it would be reversed. While the court of last resort does not in its judgment make a statement of the law relating to "future" contracts in grain, its affirmance of the judgment on the condition named amounts to a clear recognition of the validity of contracts for "futures," which earlier decisions by it have made a familiar principle of our jurisprudence.

DEATH OF EDWIN PARDRIDGE.

The greatest Bear the wheat pit has ever known is no more. Never again will the daily market dispatches state that Partridge was doing this or that. The influence of his actions on the market price of wheat is at an end, and no one is left to equal him in daring the fates of the pit.

Edwin Partridge died at his home in Chicago April 17, as the result of Bright's disease, from which he had been suffering for several months. He was born on a farm near Durhamville, N. Y., Oct. 24, 1835. He received a district school education, clerked in a country store a few years, and then



EDWIN PARDRIDGE.

went to Buffalo, where he started in the dry goods business with his brother. He withdrew from this firm in 1869 and came to Chicago, where he immediately started in the same business. The great fire of 1871 swept away everything but his residence, which he mortgaged and again started in the dry goods business. He was remarkably successful in this business, and commenced to speculate a little on the side. Gradually his speculations grew larger and larger. His brother withdrew from the dry goods partnership. After a time the business was discontinued and Ed Partridge, the plunger, devoted his entire time to speculation.

Several times he suffered heavy losses on the Board, and was on the brink of bankruptcy. In one campaign which proved a profitable one for Mr. Partridge, he is credited with having out the greatest short line ever sold by any Bear. It was not until this campaign was closed, and Partridge, after steadily buying wheat for three weeks on a steadily declining market, had pocketed his winnings, that the trade grasped the immensity of his operations. The leading firms through whom he had traded compared notes and found that he had covered 20,000,000 bushels of short wheat. Everybody was aghast at the danger they had just missed. He showed by subsequent operations that he did not again contemplate such a large deal—half of 20,000,000 was large enough.

His good fortune was largely due to the queer course he always adopted, one that no other than

Partridge could have adopted without having been forced into bankruptcy. He would fight an advance as long as his ready money lasted. When that gave out he would tell his commission men to do what they pleased, carry him if they wanted to or cover his line if they chose to. He would declare his inability to put up margins. The result would be that the commission men would buy his wheat in as well as they knew how, and then Partridge would pay the losses. Sometimes it compelled him to raise money on his investments, but the usual result would be that, after the deal was over, no matter how tremendous the loss, it would not involve more than his cash assets. He would have left at least all his real estate. He was quite small in stature, weighing scarcely more than 100 pounds, yet in that compact and wiry frame was enough greatness to make his associates in life respect and fear him. His gait was shambling and awkward, he stooped just a trifle—owing to his early clerkship in a country store—and his cheap sack coat with side pockets was off the same piece as his baggy trousers. His Derby hat was as unpretentious in style as were his solid, but plain-looking shoes. Partridge's speech was awkward as his gait. He was aware of this, and said little, though he was at the same time not at all reserved or taciturn. His head and his heart were about all there was to him. These were large enough to offset his insignificant figure, and his awkwardness of manner and expression. One of his peculiar traits was the drawing down of one side of his mouth whenever he was laboring under an unusual mental or nervous strain. This was the only visible sign of agitation.

He was a man of clear perceptions, and his strong convictions and the nerve with which he backed them made him a marked man. Since 1869 he had been a familiar figure in local commercial circles, and for the last ten years, during which he had devoted himself almost exclusively to speculation, his name and fame were world-wide. Probably no man, as merchant and operator, had been called upon in the West to meet such odds and face such opposition, and those who knew him are agreed as to his business acumen, courage, common sense, and kindness of heart.

RECIPROCAL DEMURRAGE.

The Railway Review, which is disposed to give all interests fair consideration, says: Space is given this week to the text of a bill introduced into the Ohio Legislature providing for reciprocal demurrage. Whether or not the provisions of the bill are the best calculated to meet the difficulties which have given rise to its submission it is not now intended to discuss, but whatever may be the facts in that regard, the theory underlying the bill is correct. The principal misfortune is that it should be found necessary to appeal to the Legislature for the establishment of a proposition of this kind.

Railroad legislation is not calculated to favor railroads, and in a case like the one under review, where it can be shown that railroads have not been fair in the matter, the people's representatives will not take any large amount of pains to protect their (the railroads') interests. It will be much better if the railroads of Ohio, as well as those of all the states, would forestall legislative action by putting into effect such regulations as will recognize the rights of the shippers in this particular. Not only is such action due the patrons of railroads, but it is believed the effect of such a regulation upon car movements would be found fully as profitable and beneficial to the roads as was the car service regulation when first introduced demonstrated to be of actual profit to the shippers.

Iowa has an unusual crop condition this year. It has been estimated that there are 60,000,000 bushels of corn in the north half of the state, two-thirds of which farmers are holding, the remainder in the hands of speculators. At Clarion, in Wright County, there is over a mile and a half of 10 and 12-foot cribs full of corn. The Department of Agriculture estimates the amount in farmers' hands in Iowa, March 1, as 164,176,650 bushels.

A CONVENIENT SAMPLE PAN.

One of the most convenient pans for examining samples of grain without losing any part of the sample is shown in the illustration given herewith. The pan was designed and made for the Chase Elevator Co. of this city. It is not patented, so anyone can make and use it. The pan is made of Russian iron and one end is tapered to a spout so that the sample, after being examined, can easily be returned to the sack without spilling any of it.

The pan is 12x16 inches and 2½ inches deep. Twelve inches of the length is tapered, the spout being but 1¾ inches wide at the mouth. It is made out of one piece of iron and has pressed seams. The edge of the brim is rolled over a copper wire which keeps it in shape and makes the pan very strong.

These pans have been found very useful in examining samples of oats which now contain a large amount of seeds. The sample can be spread out so that all parts of it can be carefully examined, and that, too, without losing any portion of it. It is pronounced by old grain men who have used it to be the best sample pan ever designed.

THE CHINCH BUG.

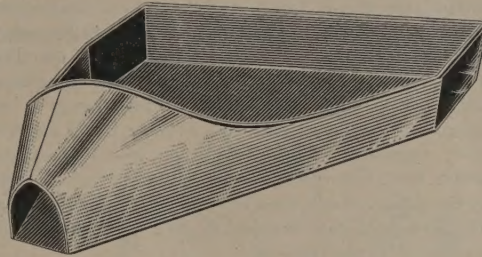
BY PROF. W. G. JOHNSON, CHAMPAIGN, ILL.

Of all the insects that interest grain dealers none is of such importance as the chinch-bug, *Blissus leucopterus*. Its presence or absence in certain localities often determines the abundance or scarcity of wheat and corn. The aggregate loss to crops annually in the central Mississippi valley occasioned by this insect is, perhaps, greater than that of all other injurious insects combined. It is safe to say that the losses from the chinch-bug alone for the last twenty-five years amount to more than three hundred million dollars. This seems like an incredible sum, but is a very conservative estimate. The loss for a single year has been as high as sixty million dollars. A loss of about nineteen million dollars was reported from Missouri alone in 1874. An insect capable of such destruction to growing crops certainly deserves the careful attention and consideration of every thoroughgoing business man who handles the cereals, especially wheat and corn. Some notes, therefore, will not be out of place at this time, as complaints of injury to wheat are already beginning to come in to the office of the State Entomologist.

The chinch-bug has been known in this country for more than a hundred years, but was not known to science until 1831. It is pretty generally distributed over all the states east of the Mississippi River, and extends as far west as Colorado. The insect is supposed to have come from the South, either Central or South America, and gradually spread northward and eastward over the United States. It is found in greatest abundance in Indiana, Illinois, Missouri, Iowa, Eastern Kansas, Nebraska and South Dakota, and Southern Wisconsin and Minnesota.

In order that my readers may better understand this insect I have selected with great care typical examples of its various stages and have had them drawn under my direction by Miss Lydia M. Hart, an expert zoological artist. The illustration is therefore presented herewith for the first time, and I trust will make my account of the development more easily understood. The eggs (see a) are extremely small and are very rarely seen by the average observer. It would take thirty-three of them laid end to end to make a line an inch long. They are pale white when first laid, but become more or less amber colored as the young matures within. I have shown by experiment that a single female is capable of depositing as many as two hundred and thirty-seven eggs. She is several weeks in depositing them and lays as many as fifteen or twenty at a time. The eggs for the first brood are deposited largely in wheat, oats and grasses, and for the second brood usually in corn, but some seasons favorable for a second growth of oats and grass, the bugs remain in them and deposit their eggs for the second generation. They are laid usually behind the leaf sheaths near the ground, and at times may be found

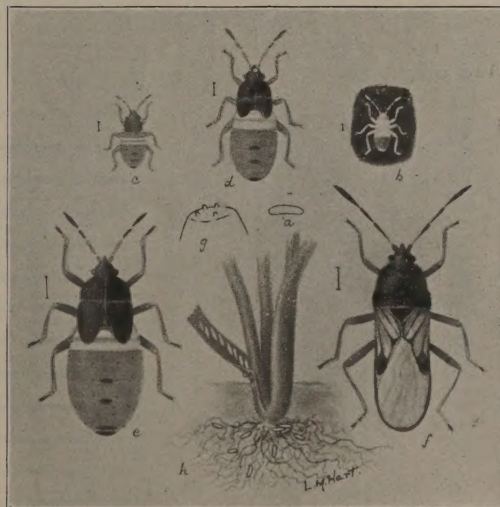
under the surface on the roots as shown in the illustration (h). About two weeks are required for hatching, but the period varies considerably with the season and other conditions. It has long been supposed that water was directly destructive to the eggs, but I have shown by a series of experiments that eggs will hatch if kept under water the entire period of incubation. August 20, 1895, I took a lot of fresh-laid eggs and immersed them in rainwater, the temperature of which varied from 71° to 83° F., where they were left. All the eggs hatched in 283 hours, or about 16 days. None of the bugs were able,



A CONVENIENT SAMPLE PAN.

however, to get to the surface, but when helped out on a needle point they crawled away at a lively pace. Rain, no doubt, is destructive to very young bugs, but death is due to the mechanical action of the water pattering them into the ground.

The newly hatched bug (b) is a very small, delicate creature of a pale color with the abdomen nearly blood red. They begin feeding as soon as they emerge and shed their skin in about two weeks. This molting takes place four times before the adult insect is reached, thus the various stages, b, c, d, and e, are accounted for. If it is borne in mind that the eggs from a single female are several weeks in being deposited, it is clear that bugs in all stages of development can be seen most any time during the early and latter part of the season. The eggs of the first generation are those that are laid by those that winter over and appear early in the spring; the second brood eggs are laid by those that mature from the first and are usually deposited in July and August. The adults of this generation are those that winter. Late in the fall they crawl into any place that will afford them shelter and protection.



THE CHINCH BUG FROM EGG TO ADULT.

Old logs, trees, stumps, rails and rubbish, osage orange hedges, corn fodder, stools of orchard grass, timothy and prairie grass afford comfortable winter quarters.

It is a well-known fact that chinch-bugs very rarely use their wings, except in the early spring when hunting a place to deposit their eggs and in the fall when getting ready for winter. There is at times a midsummer flight, but this rarely happens. As a rule the bugs go from one field to another after harvest, on foot, whether they have wings or not. By taking advantage of this peculiar habit we find the most reliable and satisfactory method for arresting their advance as they pass from one field to another at harvest time is to make dusty furrows

around the infested field. I made a practical demonstration of this method last season at Edgewood, Ill., and was highly successful. In case the ground is too wet for making furrows, coal tar can be used to good advantage. The bugs dislike the tar and by pouring a stream of the substance along on the ground the barrier is complete. A line of tar as wide as one's little finger is all that is necessary, and by sinking post-holes along the line about every fifteen or twenty feet the bugs can be trapped and destroyed.

Many exaggerated reports have been published throughout the country regarding the contagious diseases of the chinch-bug. I have devoted much time experimenting with both the principal diseases, the "white muscardine" and the "gray muscardine," of this insect, and have yet to see the first thing in the field or laboratory that would warrant the least possible hope of ever destroying this pest on a large scale by this method. The only safe method consists in good farming, that is the careful selection of land for various crops, and the protection of these crops from these invading hosts by means of barriers and traps.

THE MISSOURI INSPECTION NEEDS REFORMING.

It is high time that the Railroad and Warehouse Commissioners of Missouri informed the grain trade of the state whether or not they intend to institute the reforms demanded regarding the grading of grain. The Missouri State Grain Inspection Department has been appealed to by the millers of the Central, Southern and Western states, by the Merchants' Exchange of St. Louis, and by a majority of the grain merchants doing business in Kansas City, to reform the present system of grading grain and thus elevate the service to the standard. Reasonable and voluminous arguments have been urged, exhibiting with emphasis the crying need of higher grading, both in Kansas City and St. Louis, yet the high and mighty commissioners have not deigned to respond. They idle the days away while the trade awaits deliverance from the evils of a system that incompetence only could invent and no public disregard this side of nepotism would sustain.

Everybody but the mixers and doctors of grain have demanded, requested, yea, even begged, for the commercial emancipation that must follow the enforcement of rigid rules of inspection in Kansas City and St. Louis. In spite of appeals, prayers and protests the commissioners continue inactive, evidently of the opinion that their official power is superior to the might of an abused, misused and humiliated business public. Indeed, it would seem that the Missouri Inspection Department, if we may judge from the conductorship it still survives, is an institution devised for and maintained in order to give lucrative positions to relatives of the board of commissioners mentioned and their friends in politics.—Modern Miller.

On account of favorable reports of winter oats in the North last fall, a number of our readers invested in seed and gave them a trial, hoping to find in them a means to lessen spring work. We have heard from several of the experimenters, and without exception reports have been decidedly unfavorable. Not enough of the oats have survived the winter to give encouragement to the hope that they will be successful in northern latitudes.—National Stockman.

A suit recently brought in the United States Circuit Court against Milmine, Bodman & Co., grain commission merchants of New York and Chicago, for \$50,000 was said to be an ordinary suit in debt brought by R. R. Beard, receiver of the First National Bank of Pella, Iowa. A declaration now filed shows it is a suit to recover money paid by E. R. Cassatt, ex-president of the bank, to cover board of trade transactions from Aug. 20, 1891, to Feb. 12, 1894. It is charged that Cassatt, as president, drew checks on the bank's balance in Chicago in favor of the brokers, while the bank had no interest in the transactions.

THE METRIC SYSTEM IN GREAT BRITAIN.

The bill providing for the enforced use of the metric system in Great Britain has not been passed by the British Parliament, but the manufacturers who are prominent in the export trade are working hard for it and seem to be confident of success. In a recent editorial Engineering of London gave a number of excellent reasons why the metric system should be adopted at once, and most of these apply with equal force to the United States. From the article referred to we take the following:

Political and religious causes rendered it impossible that the English people should take any part

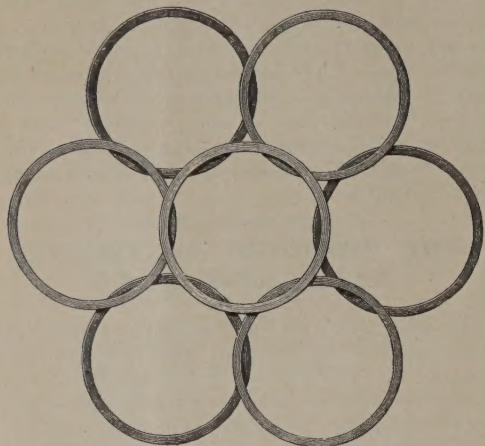


FIG. 12. THE CONSTRUCTION OF GRANARIES.

in fixing the length of the meter. But, as we lately pointed out, the final touch is soon to be put to the metrical system by the determination of a metrical screw thread. It will be a thousand pities if English engineers do not assist in this matter. If they hold aloof, a decision will be reached in their absence, and eventually they will have to accept it, just as they will soon have to accept the meter. Even if they deny the certainty of this, they must admit that there is some chance of our following the lead of Continental nations, and it is only common prudence to render the change as easy as possible to ourselves. We all insure our houses, though none of us expect them to be burned.

The essential principle of the metric system concerns neither decimal notation nor the length of the meter. These are mere accidents, although one of them was unavoidable, and the other is now irremediable. Its grand features are that it is based on a single unit both for measures of length, measures of weight, and measures of quantity, and that it admits only one divisor. The gain implied in these two propositions is so immense as to completely overshadow all the criticisms that can be brought to bear on its less satisfactory features. A correspondent said that the sole advantage was in computation. If that were true, and it is not, that gain would be sufficient to counterbalance all the disadvantages. Naturally, people who never compute anything, except their balance at the bank, are content with the present system. They should remember, however, that they have partners who are not so happily situated. The landowner is sleeping partner with the farmer who tills his fields; the shareholder is vicariously engaged in trade, however aristocratic his pretensions. We all live on the proceeds of hard work—our own or that of somebody else—and therefore we are interested in reducing any part that is unremunerative. In every office, shop and factory, people are employed in bookkeeping and calculating who could be dispensed with if a simpler process were in vogue, and industry is taxed because our measures of length, weight, and capacity are founded on different bases. Our school children are worse educated than they would be if valuable time were not occupied in learning tables and various rules of arithmetic designed to deal with our peculiar units. On all sides there is loss due to time spent in computation, and that loss is of national as well as of individual importance.

The manufacturers who are crying out for the metrical system will have to endure all the burden

and worry of the change, and are prepared to do so for the sake of the benefit that they will reap. The man in the street, who receives so much consideration from statesmen, will scarcely be conscious of the alteration. He will buy his tobacco by the 100 grammes instead of by the quarter-pound, and his wife will purchase calico by the meter instead of by the yard. The tradesman will adjust the price to the new conditions, and for all practical purposes the ordinary buyer will know no difference. To delay a great and much needed reform for such puerile reasons as are put forward betrays a total want of appreciation of the seriousness of the position of our export trade, and it is time that either better arguments were found or that active steps were taken to prepare for the change. The teaching of the metrical system of weights and measures ought to be made immediately compulsory in all elementary schools, and the system itself permissively legalized. These two steps would show the public that the change was actually coming, and would oblige people who have hitherto done nothing but pooh-pooh the matter to give it a reasonable amount of consideration.

KANSAS TRACK SCALES LAW UNCONSTITUTIONAL.

Judge Thompson of the district court recently rendered a decision at Salina, Kan., in which he declared the law requiring railroad companies to provide track scales unconstitutional.

A suit was brought by the Ripke-Guhne Grain Company against the Rock Island Railroad Company to recover damage for shortage in grain shipments made over the Rock Island, and the plaintiff made the complaint that the railroad had not complied with the provisions of the act.

The law in question is chapter 100 of the statutes of 1893, and is entitled "An act for the protection of shippers of grain, seeds, hay, etc." It provides that every railroad shall construct and provide, and keep and maintain in good order, a track or car scale of sufficient capacity, and suitable for weighing grain, seed, hay, etc., in carload lots and in the car, at every town or station upon its line of railway from which the aggregate shipments of grain and seeds during the preceding year were more than 100 cars. The carriers are given the option of accepting the weights of any public weigher, or of the shipper, if they so desire. The entire law protects the consignee instead of the shipper.

The constitution of the state provides that the

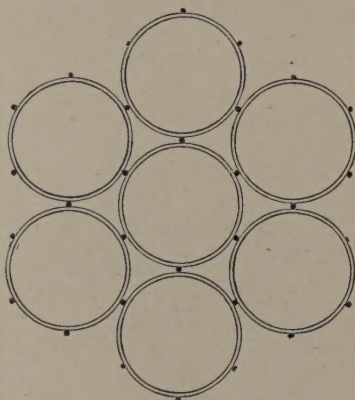


FIG. 16.

purpose of an act shall be clearly stated in the title, and on this ground Judge Thompson decided the law unconstitutional, as the title of the act stated that it was for the protection of shippers, while the body of the statute looked toward the protection of the consignee.

As it is a state law it could not be made to apply to interstate shipments, at least some of the courts have seen fit to hold that this was an interference with interstate commerce. We need a national law providing for the issuance of a clean bill of lading. Such a law would compel carriers to accept weight reported or provide scales, and when shortage occurred they would have to make good the loss.

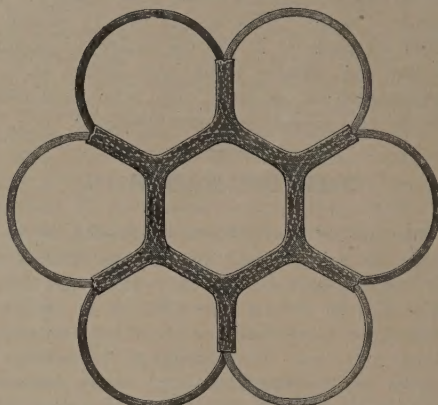
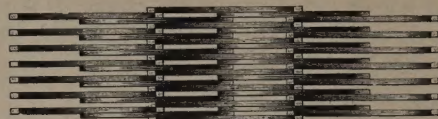
Crop reports are always welcome.

THE CONSTRUCTION OF GRANARIES.

No. IV.

BY F. STALLMAIER.

There are two more systems of silo construction to be added; distinguished by their cheapness, stability, and fire safety. One is known as Schaeffer-Luther's patent, the other as Rabitz's patent, which is practiced by G. Luther of Brunswick. Both systems are based upon using the cylindrical shaft shape bins. The first-named has the



FIGS. 13 AND 14. THE CONSTRUCTION OF GRANARIES.

preference of avoiding the trefoils as far as possible. The erection of shafts according to Schaeffer-Luther's patent is done by building up flat iron rings in such a manner as to lay first an iron ring for one shaft and covering the same partially with rings belonging to the neighboring bins, as illustrated in Fig. 12. By so doing a space is left free between two rings, as shown in Fig. 13.

When the iron framing is built the walls of the bins are made by filling up the space left between the rings with concrete, so that a strong connection with one another is obtained.

The stability depends upon the overlapping of one ring over the other, and is to be chosen accordingly. As seen in Fig. 12, the space between the three

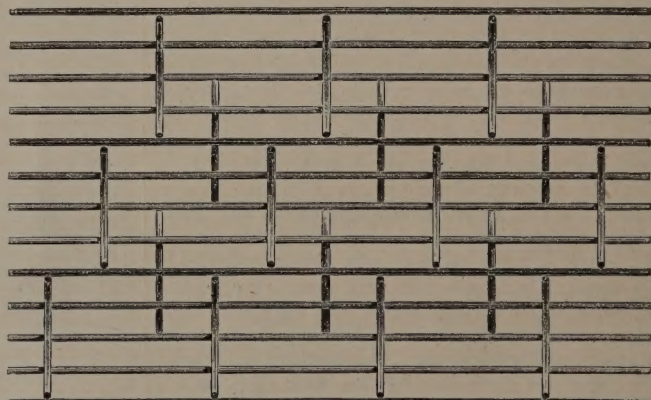


FIG. 15.

circles is reduced to a minimum, and the bins receive, when covered with concrete, the hexagon shape, as Fig. 14 illustrates.

This system combines the advantages of the circle, hexagon, and brickwork, viz., in regard to stability, space, utilization, and safety against fire. The iron rings give the whole a strong support, and considerably lessen the thickness of the walls.

Rabitz's patent is shown in Figs. 15 and 16. It consists of a firm skeleton, which is covered with an absolutely fireproof gypsum-like paste. In order to erect the skeleton, it will be found well to divide the ground plan into hexagons, and mark every corner of the same with round iron rods extending to the full height of the silo.

To find the number of rods required the formula

$n=2(a+b)+3z-1$ may be used— a the number of bins in one row, b the number of rows, and $a+b=z$ the number of bins to be erected. These rods are then supported by an iron ring forming the inscribed circle and fastened to the same by wire. Round these rings coarse wire webbing is stretched in such a way as to form a receiver for the paste. Rabitz's system has not the advantage of utilizing space, but the whole system is very simple and cheap, and although light in construction it is of great stability.

Not only is the shape and construction of the bin walls of great importance, but also the base of the shaft has to be considered, as it is intended to discharge the stored grain to a given point absolutely automatically. Pyramid and cone are the most practical forms for bin bottoms, but they have the disadvantage of discharging the grain above the outlets first; therefore that grain which is against the walls has no opportunity of getting turned, consequently it will decay if more grain is turned into the same bin before the bin is emptied. [Such a thing has never happened.]

The sharper the angles of the ichnographic projections of the bins the more irregular is the discharge of the grain, and therefore more visible by the square than by the circular shape. Should it be impossible to turn the grain into another shaft, the bin bottom should have more than one outlet, or a second bottom with as many outlets as possible must be placed above.

Pyramidal outlets are disliked, as the inclined condition of the bottom prevents inspection, it being inaccessible, and for that reason in many cases horizontal bottoms with three or four outlets have been adopted. This arrangement requires a more simply-constructed foundation, as only vertical compressing strains are to be dealt with. A more regular discharge is obtained by the use of several outlets, although, in consequence of the horizontal bottom the same is not automatic, as between the outlets the grain forms in heaps, and it must be shoveled to the outlets to get it out.

Different materials are used for constructing the bottoms, as for a silo with brickwork shafts, the bottom being the only carrying part, of course, will be constructed of brickwork, in such a manner as to place the bins upon the vaults; or, if the bins are of wood or iron, the same material may be used for the bottom.

A very fair example of an iron bottom is given in Figs. 17 and 18, where the ground floor is of considerable height, for the purpose of allowing cars to be brought into the building, and to give room for a loading platform. The turn table A is of some interest, the same carrying four tracks instead of two. By it a wagon can be brought from the outside rails, which run along the front wall, by one-quarter turn to the rails across the building, and by another one-quarter turn to the parallel rails.

[TO BE CONTINUED.]

As usual in such cases, the stockholders of the Farmers' Elevator at Goodwine found, on balancing their books, that there is a balance of \$3,000 on the wrong side of the ledger. Every man to his own business, and it a safe rule to fight shy of the cooperative institutions.—Enterprise, Kentland, Ind.

The Dakota National Bank of Sioux Falls, S. D., has brought suit at Minneapolis for the recovery of several cars of wheat which were shipped from Sioux Falls. The bills of lading were attached to the drafts, which were discounted at the bank. The defendant claims that the wheat was delivered with the knowledge of the bank, and that it was consigned with that undertaking.

The Canadian Department of Inland Revenue has canceled the order-in-council which reduced the remuneration for inspection of grain at Fort William and fixed the salary of the inspector. The order-in-council reduced the rate from 60 to 40 cents per car and fixed the inspector's salary at \$4,000. The restoration of the old rates, which the action of the department practically amounts to, is denounced as unjust, being an unnecessary tax on the grain interests of Manitoba and Western Canada.

WILL AMEND THE INTERSTATE COMMERCE LAW.

Another effort to strengthen the interstate commerce act was launched at Washington recently. It will be recalled that the Supreme Court recently wiped out one of the most important purposes of the act by deciding that it did not restrict freight charges on imported shipments in transit by rail from the port of entry to their destination. The case in which this decision was made was called the import rate case. The Texas & Pacific Railway was directly involved, and the court held that that company might impose higher rates on domestic

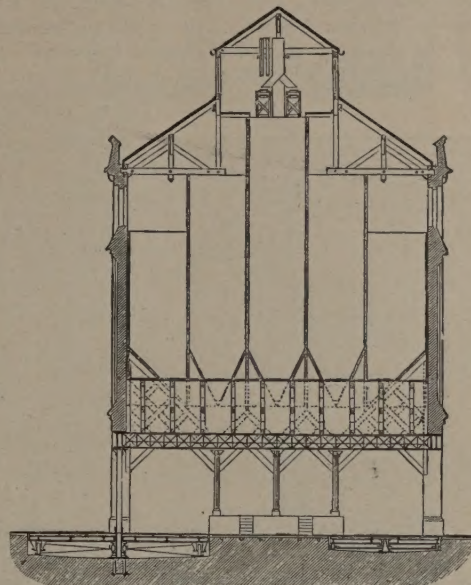


FIG. 17. THE CONSTRUCTION OF GRANARIES.

freight from New Orleans to San Francisco than it imposed on foreign freight brought to New Orleans by steamer and transported from New Orleans to San Francisco by rail. Of course, the decision had general application.

To avoid just such discriminations was one of the purposes of the interstate commerce law. The amendment offered has the sanction of the Interstate Commerce Commission. It applies only to sec-

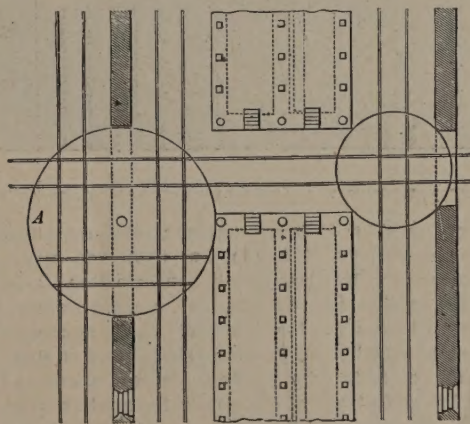


FIG. 18. THE CONSTRUCTION OF GRANARIES.

tion 7 of the act and section 7 is the one which contains the real vitals.

The amendment provides that the words "circumstances and condition" in section 7 shall be held to refer only to such circumstances and conditions as directly relate to transportation by carriers subject to the power of the act—that is, to carriers doing business within the bounds of the United States. It shall not therefore pretend to refer to steamship companies in international trade. The amendment then goes on to provide that such carriers shall not charge more for transporting domestic freight between points in the United States than they charge for transporting between the same points in the same direction, freight of a like general description, shipped from or to a foreign country, to or from places in the United States. In other words, the amendment gives to the Interstate Commerce Com-

mission the power to control rates on freight the moment it touches United States soil, without regard to any through rates that may have been made in a foreign land.

THE CONSUMPTION OF OATS.

The apparent dullness in the oat market for a year or more has been ascribed to the great increase in the use of bicycles and the displacement of horse cars by cable and trolley lines. This was such a natural inference that it was pretty generally accepted without question, and, of course, it stands to reason that the substitution of cable and trolley for horses must have made some difference. Therefore many of our readers will be surprised to learn that there has been only a slight decrease in the volume of business in oats in this market during the past six years. This is demonstrated by the following table showing the receipts here for the years named, the exports for the same time and the domestic consumption in round numbers.

1890 receipts	33,744,000
1890 exports	9,301,000
Leaving for home use	24,443,000
1891 receipts	27,737,700
1891 exports	3,205,500
Leaving for home use	24,532,200
1892 receipts	30,600,000
1892 exports	3,742,800
Leaving for home use	26,857,200
1893 receipts	29,508,000
1893 exports	5,197,000
Leaving for home use	24,311,000
1894 receipts	26,657,500
1894 exports	382,800
Leaving for home use	26,274,700
1895 receipts	25,207,000
1895 exports	1,497,000
Leaving for home use	23,710,000

It will be observed that the total remaining for local consumption in 1895 is only slightly smaller than in 1890, 1891 and 1893. As a matter of fact it is probable that last year's consumption of oats—so-called—was fully as large as in 1890 and 1891. Of course outsiders will find it difficult to understand how the consumption can exceed the receipts, but the explanation of it is simple. In short last year oats were decidedly high and wheat relatively low, and hence a pound of oats brought more than a pound of wheat. As a natural consequence dealers found it profitable to buy wheat to mix with oats. It cannot be denied that the use of oats must have been lessened somewhat, owing to the increasing employment of trolley and cable as a motive power, but nevertheless it is said that many of the horses discarded on this account have been put to other uses in this vicinity. Moreover it is alleged that the extraordinary growth of the bicycle fad has not restricted the use of oats in this city materially because the majority of bicycle riders never could afford to keep a horse, while the well-to-do class still keep their horses even if they use bicycles.—New York Produce Exchange Reporter.

Even if goods have been delivered to a carrier consigned to the buyer, and insolvency occurs before they reach the actual possession of the buyer, the seller may exercise the right of stoppage in transitu to recover his possession, and thereby revive his lien. The right of stoppage in transitu is but an equitable extension or enlargement of the seller's lien, and is not an independent or distinct right.

The allowance by law of days of grace has been abolished in Ohio, and all negotiable bonds, promissory notes, bills of exchange and checks, payable at a certain day after date, or after sight, shall be deemed due and payable on the day mentioned for the payment of the same, except that when such day mentioned be upon the first day of the week or a legal holiday, then the day of payment shall be upon the next succeeding business day.—Business Law.

ROBBING THE MANITOBA GRAIN SHIPPERS.

American grain shippers may think that they suffer at the hands of the railroads, but they are highly favored as compared with their brother shippers of Manitoba. We take the following from a recent number of the Montreal Trade Bulletin:

The undeniable proofs which we have repeatedly brought forward to illustrate the manner in which the poor farmers in Manitoba are bled by the exorbitantly high rates charged on grain by the Canadian Pacific Railway continue to accumulate, one of the numerous instances that are constantly occurring being that of a carload of feed wheat shipped from Manitoba to this city containing 630 bushels, which arrived here a few days ago and sold at 40 cents per bushel, amounting to \$252. Of this sum \$220 went into the pockets of the C. P. R.,

HANDLING EXPORT GRAIN AT PORT ROYAL, S. C.

The attention of those engaged in handling grain and in kindred lines of business has been attracted during the past winter by the large proportion of the export trade in cereals which has been handled by the Southern ports. Heretofore most of the ocean grain freight has been billed through New York or other Northeastern Atlantic ports. Whether the diversion of such traffic has been the result of a too independent feeling on the part of the management of the Northern routes, or whether the physical advantages of the Southern ports are such as offer greater inducements for this traffic, is a matter which has agitated somewhat the Northern and Western railroad interests. In a private circular letter to Western railroad managers Commissioner Midgley gives this explanation of the movement:

though 2,593 carloads were carried to Chicago, the bulk thereof was unloaded into elevators, pending the opening of lake navigation. The billing for 3,548 cars showed no destination beyond St. Louis, Carondelet, Burlington, Beardstown and Chapin; but it was estimated that fully 75 per cent. would be carried in barges to New Orleans, while some of the Carondelet receipts were known to be exported via Port Royal.

"Assuming, therefore, that 75 per cent. of the grain carried to St. Louis, Carondelet, Burlington, etc., would go south via New Orleans the movement was as follows: Via New Orleans and Galveston, 12,303 cars; via Atlantic ports, 2,070 cars; via Chicago, 2,593 cars; uncertain destinations, 887 cars; total, 17,853.

"After February shipments via the gulf ports were comparatively light, owing to restoration of former rail rates and the continued depression of the mar-



GENERAL VIEW OF THE PORT ROYAL & AUGUSTA RAILROAD DOCKS AT PORT ROYAL, S. C.

leaving a balance of \$32, which, after deducting commission charges for selling and the shipper's profits, would reduce the above balance to at least \$20, or about 3½ cents per bushel. Out of 630 bushels of wheat shipped from Manitoba to this market the C. P. R. appropriates 550 bushels for freight and other charges. But this is not all, for after making the above extortionate charges the company charges the much-abused Manitoban 38,000 pounds, or 200 pounds more grain than he actually ships. These are facts that cannot be disputed. If this is not bleeding the poor Manitoba shipper with a vengeance, we would ask, what is?

The Chicago Times-Herald says: "The Chicago representatives to the Charleston Grain Congress report that the convention was chiefly interesting to the South, and gave the impression that the northern routes would need to look after their grain business." The meat in the above cocoanut is, that all northern grain centers are interested in the question, and a remedy in large part is a reduction in the terminal charges at Buffalo and New York. Here is the contrast: At Newport News and New Orleans the terminal charge on grain is ¼ cent for a transfer. At Buffalo and New York it will average 2 cents at least. For export, corn cannot bear such charges. —Toledo Produce Exchange Report.

"Foreign ships in large numbers came expecting to secure cargoes of cotton, but that crop was a comparative failure last year in Southwestern states. South Carolina and Georgia had a good average, but notwithstanding the light yield in the aggregate there was sufficient 1894 cotton held in store at Memphis and other interior points to depress prices and dwarf the offerings; whereupon in the anxiety to secure return tonnage the ocean carriers solicited corn at prices unprecedentedly low. That condition continued throughout the season from Galveston, New Orleans, Port Royal and as far north as Norfolk, Va. Consequently shipments of grain via those ports from Kansas and Southern Nebraska attained startling proportions.

"The gross movement of corn from the territory last described during the five months ending with March, 1896, exceeded 20,000 carloads. A conservative average of the weight of each car would be 35,000 pounds, indicating a total in bushels of 12,500,000.

"Out of a total of 17,853 carloads, forwarded from Western territory during the months of November, December, January and February last, 9,642 carloads were exported via Galveston and New Orleans, and only 2,070 carloads were consigned to Atlantic ports. Of the latter there were no considerable shipments to any port north of Norfolk, Va. Al-

kets. As the Illinois Central carries considerable grain from its stations north of Cairo to New Orleans it is assumed that the total receipts of corn at that port during the five months ending with March, 1896, exceeded 12,000 carloads. The trunk lines were utterly unable to compete with the gulf rates. The routes to the South were enabled to reach tide-water at rates from Kansas and Missouri River points which, if applied eastward, would have carried the grain little beyond a meridian drawn through Chicago. When the grain arrived at Galveston, New Orleans or Port Royal ocean charges were available which compared favorably with those obtainable from North Atlantic ports."

Mr. Midgley concludes the circular by recommending that steps be taken to prevent the diversion of freights from the lines which he represents. It is probable, however, that the facilities for handling grain at Southern seaports and the competition of roads having their terminals at Southern ports will materially affect the course of export grain. The competition will doubtless prove advantageous to the grain trade of the country, and aside from the special and local interests involved should be looked upon as a distinct improvement, which will prove beneficial to both the grain growing and grain handling interests of the country.

There are already erected at the main harbor

points in the South many elevators and transfer houses of large capacities. Newport News, Norfolk, Port Royal, New Orleans and Galveston may be mentioned as doing a heavy grain shipping busi-

ness, and other Southern ports are undertaking to increase their facilities in order to secure a share of this growing trade. Mobile is building a grain elevator, and Charleston and Savannah are making active efforts to turn some of the export grain trade in their direction.

It has been stated by a Southern authority that for the last nine months the exports of corn from New Orleans have been over 15,000,000 bushels, against 17,000,000 bushels from New York, thus giving New Orleans second rank in the corn shipping business of the country for that period, and that during the last three or four months over 20,000 carloads of Western corn have reached South Atlantic and gulf points.

The South is to be congratulated upon the diversification of business, both export and import, that will naturally follow the large movement of any product from their harbors, and the country at large will probably feel that the diffusion of such business through a number of our cities will be of greater benefit than the concentration of this traffic in any one or two cities.

As an interesting illustration of the means adopted at one of the Southern ports for effecting the transfer of grain from the cars to the steamers, we show herewith three engravings of the transfer plant of the Port Royal & Augusta Railroad Co. at Port Royal, S. C. In order to preserve the floor room of the warehouse for storage and freight handling purposes, and as well to secure the necessary fall for spouting into the vessel's hold, the grain has to be transferred over the roof of the warehouse. It was also required that the conveying device should reach out over the dock's line so that the grain would flow freely into the hold. In docking and clearing the vessel any overhanging device that was permanent would interfere with the rigging or upper works of the vessel, so that the device to be acceptable must be of such a character that it could be removed and thus leave clear dock room for the vessels.

The grain is shoveled from the cars into a conveyor running parallel to the tracks; this conveyor

delivers it into an elevator, the cupola of which is shown in the foreground of the illustration. This elevator delivers into a Caldwell Conveyor 16 inches in diameter and 200 feet long. The conveyor is

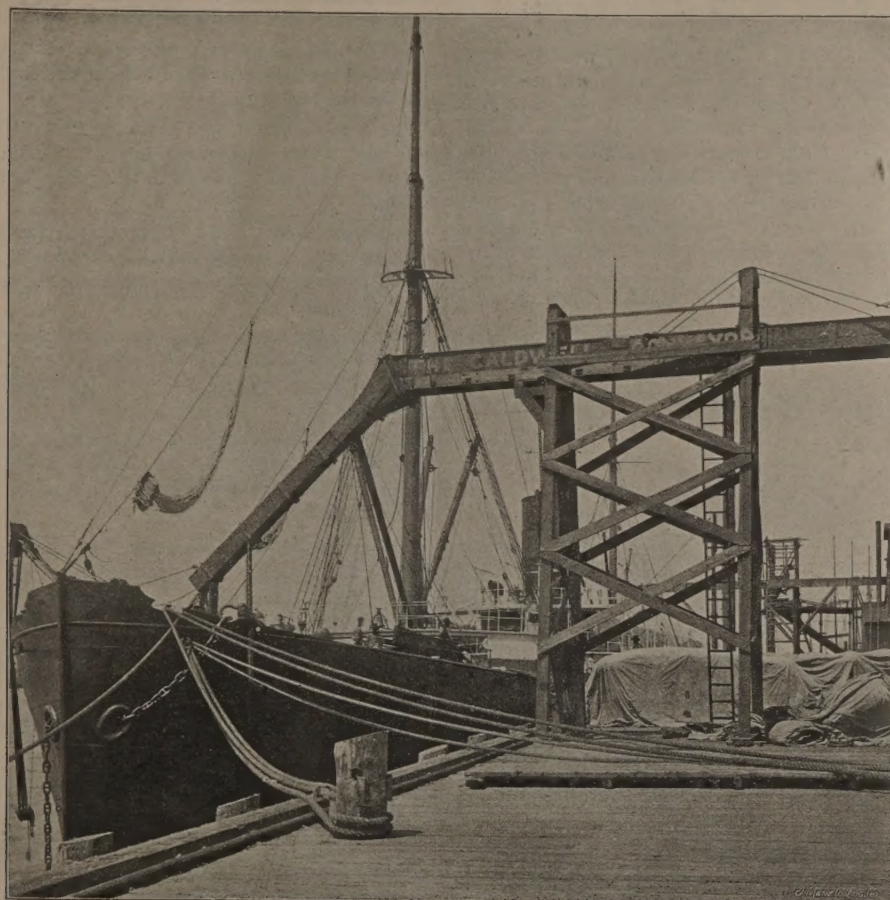
that when the conveyor is idle it can be tilted up out of the way of the vessels.

This device was designed and constructed by H. W. Caldwell & Son Co. of Chicago, Ill. The two last sections of conveyor are coupled by a square gudgeon and socket coupling. When it is desired to disengage the coupling the conveyor is moved forward and out of gear in the following manner: The tilted section of conveyor is mounted on trunion rollers, the shafts of which carry a pinion engaging in a short rack. Keyed on the pinion shaft is a sprocket wheel, and by means of link-beltting this sprocket wheel is actuated by a hand-wheel at the level of the dock floor; by operating this hand-wheel the last section of conveyor moves forward and out of gear, and when in this position is locked by pawl and ratchet. Another hand-wheel is connected by chain and sprocket wheels with the trunion shaft, and by this means the box is tilted out of the way and held in place by a simple locking device. When it is desired to connect the last section of conveyor the operation is reversed. The conveyor has great capacity, carrying 5,000 bushels per hour, and is a simple and efficient method of transferring corn from the cars to the ship's hold.

This is the only case within the acquaintance of the manufacturers, who have been engaged in the manufacture of the Caldwell Conveyor for upward of 20 years, in which a conveyor has been made detachable by means of a device operated at a distance from the conveyor itself.

The work of removing the grain and debris from the ruins of elevator A 2 at Minneapolis was finished April 29. The work occupied two months and 2,000 carloads were removed. If the company will erect a fireproof elevator in its place no more trouble will be experienced in this line.

The Iowa Secretary of State has received from Washington a bronze medal and diploma awarded the state of Iowa at the World's Fair for making the finest display of farm and garden products, and also for the greatest variety of cereals and farm



CONVEYOR IN POSITION FOR DELIVERING GRAIN.



CONVEYOR DISCONNECTED.

products of extra quality. The diploma states the display was unsurpassed in artistic arrangement and extent, and gives Iowa first rank in the world on these displays.

CLOSING THE BUCKET SHOPS.

Bucket shop men in all parts of the country are finding the business somewhat unpleasant of late. At Kansas City, St. Louis, New York and Chicago a persistent effort is being made to drive the bucket shop men out of their illegitimate business. At Chicago a vigorous campaign has been conducted against them by the Civic Federation. Some of the bucket shop men have been arrested repeatedly, but they start into business again under a new name at a new place as soon as they are free. Three months ago a large number were indicted, but got free owing to an error in the indictment. One month ago a few more were arrested and the last grand jury has indicted about 150 more, connected with the following places, on the charge of making bucket shop deals:

Equitable Produce and Stock Exchange and Cosmopolitan Commission Company, Omaha Building.
Rialto Commission Company.

Comstock, Coates & Co., Rialto Building.
Central Stock Grain Exchange, 14 Rookery Building.

R. C. Gunning, 224 La Salle street.
Thomas Commission Company, 123 Chamber of Commerce.

Western Grain and Stock Exchange, room 5, 94 Washington street.

Owen & Co., 56 South Clark street.
George Schreiner & Co., 85 Lake street.
Commercial Commission Company, Traders' Building.

William Skakel & Co., also known as Open Board of Brokers, 73 Jackson street, 170 Madison street, 48 Dearborn street, 124 Clark street.

J. J. Jackson & Co., 126 Washington street.
J. S. Level & Co., 25 Rialto Building.

McKenzie, Turner & Co., 420 Western Union Building.

Douglas & Co., 611 Royal Insurance Building.
J. G. Hulse & Co., 453 Rookery Building.

Van Riper & Co., 447 and 221 Rialto Building.
Frederick Wiggins & Co., 227 Rialto Building and 153 Van Buren street.

C. G. Mathers & Co., 706 Medinah Temple.
Millar & Co., 506 Gaff Building and 236 La Salle street.

R. B. Halligan & Co., 1011 Chicago Opera House Block.

Hampden F. Thomas & Co., 123 and 219 Chamber of Commerce.

Stevens & Co., 188 Dearborn street.
Merchants' Mining Exchange, 11 Calhoun place.

Equity Commission Company, 1 Open Board of Trade.

Several times the inmates of the bucket shops have been arrested, as they should be every time. The Civic Federation seems to be determined to close up the bucket shops, and already about 30 have discontinued, which is truly encouraging.

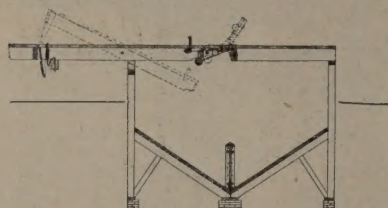
THE CONSTANT FEEDERS.

A new feeder for elevators and shellers has been brought out by The B. S. Constant Co. of Bloomington, Ill., which promises to overcome some of the difficulties elevator men have experienced in the past, especially in elevating ear corn. It is said that these feeders will feed ear corn to an elevator so that it can be elevated as easily as small grain. This feeder is automatic and will shut off the feed and prevent the elevator choking. It will bring grain from one to five dumps to one stand of elevators, and thus save the expense of additional elevators. There are five different styles of this feeder to suit different locations.

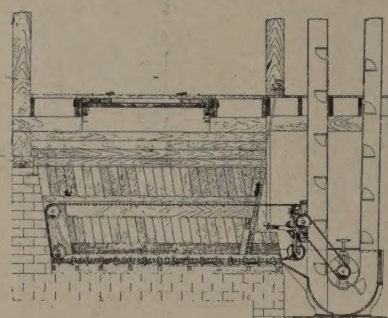
In feeding a sheller the feeder separates shelled from ear corn, carrying the shelled corn to the elevator and the ear corn to the sheller. This allows of ear and shelled corn being dumped and fed together. The shelled corn does not go through the sheller. The corn is let on the feeder in any quantity, and by means of a gauging arrangement it feeds regularly any desired quantity to dump or crib. The work is done by the lower part of the chain, as it returns to the boot. It runs from the boot through a spout which keeps the grain from it. The feeder is arranged to be stopped and started at will. It is usually driven from the shaft in the elevator boot, and runs very lightly.

In the sheller feeder the return chain goes back 7½ feet or more. The crib floor is raised at each side and sloped to the center. The center partition runs lengthwise between the bins and cribs and is

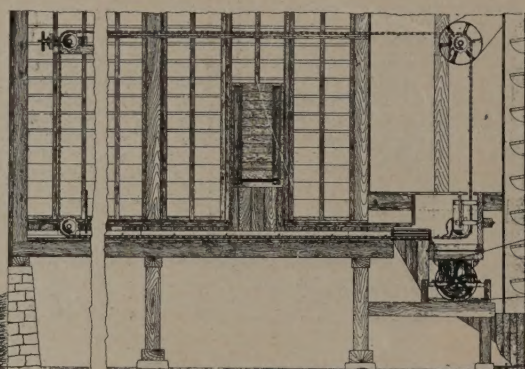
formed by a pyramidal shaped passageway resting on the floor, which is 4 feet wide at the bottom. The walls slope in, coming together 10 feet above the floor. At each bin or crib is a door 2x3 feet. Ear corn is let into the passageway by raising the doors full height. The corn goes to the feeder through openings in the platform or floor between the doors, which is used to walk on. The shelled corn that is mixed with the ears is separated by a grate just outside the sheller hopper and goes direct to the elevator, the ears going to the sheller. By this method the corn already shelled is prevented from being broken in the sheller, and the cleaner will not be overloaded. In feeding from a flat bottom crib the conveyor box is covered in sections 4 feet long. These sections are drawn out from under the corn one at a time, by means of a rod, and the corn is let down on the feeder. Corn on each side can be shoveled on to the feeder ahead of the



DUMP AND REAR END OF FEEDER.



ELEVATOR FEEDER.



THE SHELLER FEEDER.

pile, and if not enough to supply the feeder it will take it from the pile, at the same time not taking more than the amount required.

An advantage claimed for this feeder in a dump sink is that the driveway can be lowered and the same amount of storage under a dump still be retained. This does away with steep approaches to dump and makes it easier for the farmers' horses, especially in the winter. The sink is hopped only on two sides, and the feeder runs in the middle on a level from the discharge into the elevator back to the outside of the driveway.

It is said that since the decision requiring witnesses to testify as to the cutting of freight rates, secret tariffs are being resorted to by lines out of Chicago. A big shipper will announce to the railroad that on a certain day he will make a large shipment. A rate is agreed upon and the road informs the Interstate Commerce Commission that on that date it will make a certain rate on a certain class of freight, but forgets to notify its competitors. When the shipment has been made the railroad cancels the rate. Steps are being taken to circumvent this method of getting around the maintenance of regular tariffs.

..Points and Figures..

The grain trade news of your district will always be published if you will take the trouble to send it to us.

The chinch bugs have their eye on the wheat crop and the army worm is fearful that he will not get his portion.

The Times-Herald and Evening Post of Chicago will not insert advertisements of bucket shops. Neither will the "American Elevator and Grain Trade."

Is it any wonder that Congressmen are in favor with the voters on the farms, when each one has 15,000 packages of seeds to distribute?—Trade Bulletin, Chicago.

In a freight wreck which occurred near Sawyer, 17 miles from Duluth, Minn., fifteen cars of wheat were tumbled into the ditch. A large part of the grain was lost.

The B. S. Constant Co. of Bloomington, Ill., write us: "We appreciate the "American Elevator and Grain Trade," and believe that it has brought us many inquiries."

Thomas H. Christianson, formerly agent for the Empire Elevator Co. at Pierpont, S. D., was recently arrested at Minneapolis on the charge of embezzling \$400 from that company.

Send us your name before it's too late and get at a perfectly ruinous rate Davis' Grain Tables, which we will send, together with the "American Elevator and Grain Trade" one year, for \$1.50.

The Grain Shovelers' Union of Buffalo, N. Y., seems to be growing in membership, and is lusty withal. They organized for the purpose of remedying "existing evils"—low wages and the boss system in force.

The St. Louis United Elevator Co. has brought suit against Wm. H. Stevenson for \$2,250, alleging that last November he subscribed for \$2,500 of the elevator company's second mortgage bonds at \$90, but refused to take them and make the payments.

Ex-City Clerk Smythe of Tacoma, Wash., who is also an officer of the Presbyterian Church, is undergoing a church trial because he declined to desist from speculating in wheat and corn. He fell into the habit in Chicago and is making money by continuing.

Chief Grain Inspector D. W. Andrews and Supervising Inspector Smillie of Chicago have been making a tour of all of the principal grain markets of the country with a view of keeping the Chicago department in touch with the methods of the various centers.

One of the great grain shippers says: "Rebates are at an end. The man who accepts a rebate now must figure penalties as follows: He must either commit perjury, or refuse to answer and be committed to jail for contempt, or betray a friend by stating the facts. No sane man wants to undertake such an alternative."

Some time ago the New York Produce Exchange petitioned the Joint Traffic Association to remove the differential rates in favor of Baltimore, Philadelphia, New Orleans, Boston, Newport News and Norfolk, which, it is claimed, have proved ruinous to the merchants of New York, but the Traffic Association refused. The Exchange declares its intention of bringing the matter before the interstate commerce commission if relief is not forthcoming.

Recently the Supreme Court of Iowa has held that, in case innocent purchasers are not guilty of contributory negligence, their rights must be protected. If a contract is not what it purports to be, and is foreign to the purchaser's mind, he is not a party to the suit. The decision makes it necessary to show that a signer had an understanding of the effect of his actions. This is a radical reversal of the law in force in Iowa for years, which held a man responsible for his signature under practically any circumstances.

THE SOUTH AND WEST GRAIN AND TRADE CONGRESS.

The third annual convention of the South and West Grain and Trade Congress was held at Charleston, S. C., April 29 and 30, with a fair attendance. Delegates from a number of prominent Southern cities and several Northern grain centers were present. The delegates were royally entertained and shown all the points of interest about the harbor.

President Fish of the Illinois Central read a paper on "Ways and Means to Facilitate Business Between the South and West." Colonel J. M. Lowe of Kansas City talked on the agricultural and manufacturing products of the West, their consumption and distribution through the South and their ex-

indinitely increased. The convention then adjourned.

THE MICHIGAN CENTRAL'S NEW TRANSFER ELEVATOR.

As the members of the grain trade and the grain carriers learn more of the advantages of the grain transfer elevators more of them will be built. Several have been built in and near Chicago during the last twelve months, and another is now being constructed. One of the best equipped transfer elevators put up during recent years is the new house of the Michigan Central Railroad at Kensington, Ill. The Michigan Central yards at that point have ample track room to accommodate the grain transfer business as is shown by our illustration.



THE MICHIGAN CENTRAL'S NEW TRANSFER ELEVATOR AT KENSINGTON, ILL.

portation through Southern ports. Breedlow Smith of New Orleans read a paper, "How to Increase the Export and Import Commerce of South Atlantic and Gulf Ports." Frederick B. De Berard of the Southern States Exposition at Chicago, read a paper upon the manufacture of cotton goods in the South and the creation of Southern and Western depots and sales agencies for their handling and the marketing.

At the second day's session the congress decided to hold its next annual meeting at Kansas City some time during April, 1897.

Frank O'Neill read a paper on "Charleston as a Seaport." After this resolutions were adopted urging upon Congress the wisdom of building the Nicaragua canal and establishing a naval station and yard at New Orleans, improving the Mississippi, and indorsing the bill of Senator Frye of Maine for the creation of a department of commerce and manufacture, with a cabinet officer at its head. The resolutions declared that the object of the congress is feasible and practicable and that the volume of trade between the West and South can be

The new transfer elevator is 72x160 feet, and 57 feet high. It is cribbed and covered with corrugated iron, with a galvanized iron roof. Two tracks extend through the house, one is for shipping, and one for receiving grain. Grain is unloaded from the cars on the receiving track into one of the four receiving sinks, four pairs of Clark's Power Grain Shovels being provided for this purpose. The four receiving elevators have a combined elevating capacity of 20,000 bushels an hour. By these elevators the grain is elevated to the top of the cupola and dropped into the garner, from which it is spouted to the scale hoppers. From the scale hoppers it falls to the shipping bins, and is then elevated to the top of the house by one of the four shipping elevators and then spouted direct to cars by one of the four shipping spouts, thereby making direct transfers with two elevations. The transferring capacity of the house is 100 cars in 10 hours. All elevators are driven by Robinson's Single Leg Rope Drive. The house also has 47 bins, each with sufficient capacity to hold a carload.

The house is equipped with a line of Monitor Ma-

chines, including three No. 9 Monitor Oat Clippers, each with a capacity of 1,000 to 1,200 bushels per hour, and one No. 9 Monitor Separator with a capacity of 2,500 bushels per hour. These machines were especially selected by the railroad company for this elevator. They are on the scale floor, together with eight 1,200-bushel hopper scales, which are equipped with patent registering scale beams. Under each scale hopper, clipper and cleaner is a turn head for spouting the grain to the bins near by. Barrels of salt water with buckets are provided for extinguishing fires. On the ground floor is one of Simpson & Robinson's Special Car Pullers, which will pull 30 cars.

A one-story brick structure adjoining contains the power plant, which consists of three 100-horse power boilers, one 18x42 Corliss Engine, one Wainwright Heater, and a 6x4x6 duplex feed pump. All live steam pipes are covered with asbestos covering.

The plant was designed and erected by the Simpson & Robinson Co., and is thoroughly equipped with D. A. Robinson's patented machinery.

CHAFF

Send us the trade news of your district.

The big crop liars are now training for the race of their lives.

The first annual national convention of the Credit Men of the United States will be held at Toledo, Ohio, June 23, 24 and 25.

Edward S. Richards has brought suit at Chicago for \$1,000,000 against the Grand Trunk Railroad Co. for an infringement of his patent on grain transferring apparatus.

Frank Heustis of Avoca, Iowa, was recently arrested on the charge of setting fire to J. Q. McPherrin's hay barns and grain elevators near Oakland last January.

We will send Davis' Grain Tables, a book containing 219 pages of tables for use in buying and selling grain, and the "American Elevator and Grain Trade" one year for \$1.50.

Does anyone of good common sense suppose that parties who know exactly how the markets will go are willing to give the public the benefit of their knowledge? Traders who have "a sure thing" generally profit by it themselves.—Trade Bulletin.

The Rate Committee of the Southwestern Traffic Association on May 1 made rates on wheat from Idaho and Utah points to Texas points the same as current rates from California points. If the shipments exceed ten carloads the rates will probably be advanced.

In the international postal convention of 1874, which is now in force between the United States and 50 other nations, the metric system and terms were agreed upon and are now used, between these nations, which, by the way, include England. The mail matter transported being weighed and paid for in terms of metric weights.

We take the following advertisement from Zahm's circular, and republish here in hope that we may assist in bringing about the restoration of that which is lost: "LOST—A weather prophet. When last heard from he was agent for Drouth & Co. in the Ohio and Missouri Valley. Went by the name of Foster. Was what one would call a 'dry' man. Liberal reward for any information concerning this person. Address 'Moisture,' care of the 'The Daily Rainfall,' St. Joe, Mo."

In 1888 the United States invited the republics of Central and South America, Mexico, Hayti and San Domingo to a conference to be held in the city of Washington, to consider among other things, the adoption of an uniform system of weights and measures. The invitation was accepted; the conference was held. To the extent of its power, it adopted an uniform system of weights and measures. The other nations, parties to the conference, with scarcely an exception have honorably proceeded to put in force in their respective limits, the metric system thus adopted. The United States, the originator of the conference, stands alone in not abiding by its action.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

IOWA WAREHOUSE BILL DEAD.

Editor American Elevator and Grain Trade:—The bill for the establishment of public warehouses in Iowa has passed into history. The bill as published in your February number was first introduced in the Lower House, came to a vote and was defeated there. Later it was reconsidered in the house, and on this second attempt was passed. Then it went to the Senate. But it was never called up there, and it "died a-borning."

Yours truly,
M. T. RUSSELL.
Des Moines, Iowa.

SHIPPING AT TACOMA.

Editor American Elevator and Grain Trade:—According to the report of the harbor master of the port of Tacoma, Wash., for the month of March, the total exportation of breadstuffs was as follows: Wheat, 125,390 bushels, valued at \$62,695, to Africa; flour to Africa and China, 35,392 barrels, valued at \$106,176. The inward registered tonnage was 37,740, inward cargoes 2,450 tons; outward registered tonnage 39,847, outward cargoes 45,837 tons. The deep sea arrivals were 31, departures 36.

SAMUEL COLLYER,
Secretary Chamber of Commerce.
Tacoma, Wash.

WORKING FOR THE CAR SERVICE BILL.

Editor American Elevator and Grain Trade:—I have spent considerable time at Columbus in behalf of the car service bill. The Committee on Railroads and Telegraph recommended our bill to the House for passage, but too late for the session. This alone is a great victory for us, as it was the object of the railroad companies to kill the bill while in the hands of the committee, so as not to permit it to go further. To gain every point they had their attorneys from all parts of the country as well as their traffic managers and superintendents to argue the matter before that body, while on the other hand we only had nine or ten grain men of Cincinnati to defend it.

Our bill was attacked in the most ridiculous manner. They could not present a single reason as to why it should not be adopted, but kept wavering from the main point and using the most violent insinuations of a personal character against the grain trade in order to have something to say. They claimed that the grain shippers were only a poor class of people who had nothing but a desk and a stool with which to do business, and were working entirely upon the capital of the railroad companies. They tried to belittle us in all sorts of ways, instead of keeping to the legitimate question of the merits of the bill. One attorney for the Hocking Valley R. R. remarked that the grain people, as a rule, occupied an office for which they might have agreed to pay \$5 per month, but whether or not they did pay the price agreed he had his doubts, or words to that effect. One would have thought from the ridiculous talk which came from the railroads and their attorneys, that the grain and shipping fraternity was composed of nothing but paupers. I had the pleasure of pointing out to Judge Kelly, who is chairman of the committee, and the gentlemen under him, the nonsense of such assertions. I informed him that while we were burlesqued and ridiculed in a most insulting manner by our opponents, still any fair-minded man well knew that the railroads and their fraternity were supported by their freight traffic and not by their passenger traffic, and if it was not for "the poor shipper," who was at present being abused in such a violent manner, there would be no dividends declared or salaries received. The drift of their arguments, instead of meeting with favor from the committee, no doubt rather disgusted that body.

If the bill had been taken up by the House before the close of the session I believe it would have passed. It was unfortunate for us that we were so

late in getting it framed and forwarded to Columbus. However, we have not lost hope.

Yours truly,
W. W. GRANGER.
Cincinnati, Ohio.

RICE AT NEW ORLEANS.

Editor American Elevator and Grain Trade:—Following is an account of the movement of the 1895 crop of rice at New Orleans to May 1, 1896:

Rough rice, in sacks: Receipts during April 30,730, against 10,274 in April, 1895; receipts from Aug. 1, 1895, to May 1, 1896, 1,115,232, against 680,736 during the corresponding period of 1894-95. Distribution during April 37,001, against 71,248 in April, 1895; distribution from Aug. 1, 1895, to May 1, 1896, 997,434, against 624,751 during the corresponding period of 1894-95. Total stock in first and second hands: Aug. 1, 1895, 45,469; May 1, 1896, 163,267 in 1896, 99,374 in 1895; April 1, 1896, 169,538 in 1896, 160,348 in 1895.

Clean rice, in barrels: Receipts during April, 128, against 100 during April, 1895; receipts from Aug. 1, 1895, to May 1, 1896, 4,773, against 463 during the corresponding period of 1894-95. Sales reported during April 12,954, against 14,365 during April, 1895; and from Aug. 1, 1895, to May 1, 1896, sales reported were 230,001, against 155,708 during the same period of 1894-95. Total stock in first and second hands: No. 1, May 1, 18,542 in 1896, 9,079 in 1895; April 1, 22,898 in 1896, 8,707 in 1895. No. 2, May 1, 2,460 in 1896, 595 in 1895; April 1, 4,196 in 1896, 497 in 1895.

Receipts of other products in April, compared with those of April, 1895, were as follows: Wheat, 61,330, against 166,600 bushels; corn, 1,456,897, against 330,781 bushels; oats, 143,744, against 273,835 bushels; flour, 36,831, against 69,608 barrels. Shipments: Wheat, 120,189, against 292,912 bushels; corn, 2,268,186, against 421,098 bushels; oats, 8,776, against 19,172 bushels; flour, 15,607, against 9,330 barrels.

HY. H. SMITH,
Secretary Board of Trade.

New Orleans, La.

THE OHIO CAR SERVICE BILL.

Editor American Elevator and Grain Trade:—We submit herewith a copy of "House Bill 867" as amended. This bill was originally prepared by the Grain, Hay and Feed Receivers' Association, and after being approved by the Cincinnati Freight Bureau and the Cincinnati Chamber of Commerce, was presented at the last session of the Ohio Legislature. The bill drifted into the hands of the Committee on Railways and Telegraph, and at a session of that committee the various interests were invited to present arguments pro and con.

The advocates of the bill were represented by ten merchants and E. P. Wilson, commissioner of the Freight Bureau. The railway companies were represented by several prominent superintendents and their attorneys. The only argument used against the bill was the probability of a greater demand for empty cars than any railway company could furnish at a short notice. This was promptly met by the advocates of the bill, who proposed an amendment that would, beyond question, protect the interest of the transportation companies, which showed that the merchants only wanted a fair deal.

The bill was finally presented to the House, with the recommendation of the committee that it pass. Unfortunately it did not reach the House until too near the close of the session, and went over as unfinished business.

We ask you to publish the bill so that the grain trade throughout the country may appreciate the importance of it, and take steps to have the principles therein contained formulated into proper shape and presented to their respective legislatures at the next session. The bill is a good one, based on equity and justice, and should become a law in all of the states. We believe it will only require a little agitation on the subject in order to have its benefits conferred on the trade by law. It reads as follows:

"An act to promote diligence in loading, unloading and switching freight cars in the state of Ohio.

"Section 1. Be it enacted by the General Assembly of the state of Ohio, that whenever any railroad

company has established at any point in the state of Ohio, a station or stations, or other place or places, with facilities for receiving and delivering freight in carloads, it shall be the duty of said railroad to extend to all shippers and receivers of freight at such stations or places, equal, prompt and reasonable service in the use of said facilities; and it shall be likewise the duty of all shippers and receivers of freight at such stations or places, in the absence of an agreement to the contrary, to unload or to load said car or cars, as the case may be, and to do so promptly and with diligence.

"Sec. 2. That whenever any car or cars containing freight in carload quantities (which, under the conditions, of shipment must be unloaded by the consignee), shall arrive at its destination, at any railroad station or point in Ohio, it shall be the duty of the railroad company delivering said car or cars, in the absence of an agreement to the contrary, to notify the consignee by written or printed notice, of such arrival, and it shall be the duty of such railroad company to place, with reasonable diligence, said car or cars at its customary point of delivery for such car or cars so consigned.

"That if, after such notice, and the placing for delivery of any car loaded and consigned as aforesaid, the consignee shall not within a period of 48 hours, computed from noon of the day when such delivery has been made, unload, release, or give instructions for forwarding to another destination, such car or cars, such consignee shall pay such railroad company as a penalty for the detention of such car or cars, the sum of one (\$1) dollar per car, for each 24 hours, or fraction thereof, in excess of 48 hours computed as above, during which such car or cars has or have been at the point of delivery and accessible to the consignee.

"That if, after arrival at destination of any freight in carload lots as above described, the railroad company shall not notify the consignee, or shall not place the car or cars as above described at their customary point of delivery, easily accessible to the consignee, for a period of more than 48 hours, counted from noon of the day of arrival, then said railway company shall pay such consignee as a penalty for said delay, the sum of one (\$1) dollar per car for each 24 hours' delay, computed as aforesaid.

"Sec. 3. That whenever any shipper of freight in carload quantity shall notify the proper agent of any railroad company having stations, places or facilities as aforesaid, in the state of Ohio, of such shipper's desire to load for shipment over said railroad, property in carload quantity, from one consignor to one consignee, and whenever said agent shall promise and agree to furnish such car or cars so ordered, it shall be the duty of such railroad company to place at its customary point of loading, convenient of access to such shipper, the car or cars so ordered within a period of 48 hours computed from noon of the day when such order or notification has been given to the proper agent, and when such promise as aforesaid has been made; and if any railroad company having stations, places and facilities as aforesaid, shall not place car or cars as aforesaid, under such agreement, said railroad company shall pay to such shipper for each and every 24 hours, or fraction thereof, in excess of the 48 hours herein provided, as a penalty for said delay, the sum of one (\$1) dollar per car.

"That if any shipper who may order such car or cars as above described, in the absence of an agreement to the contrary, shall not load the same and have it or them ready to be forwarded, within a period of 48 hours, computed from noon of the day of placing, said shipper shall pay to said railroad, as a penalty for the detention of such cars, the sum of one (\$1) dollar per car for each period of 24 hours or fraction thereof in excess of 48 hours after such cars have been placed, as herein above described.

"Sec. 4. That whenever the consignee shall have received notice of arrival as provided in section 2 of this act, at a point where switching service is maintained, and where it is customary for the carriers by switching service to interchange freight between each other, or to transfer freight for shippers from one point of delivery to another point of delivery on the same line or upon a different line of railroad, within prescribed limits, and upon prescribed conditions; if such consignee shall, by written order instruct that such car or cars be forwarded or switched from such point of delivery to another point of delivery within prescribed limits, it shall be the duty of the railroad company promptly to perform such switching service; and if such railroad company shall not place such car or cars at such new point of delivery within 48 hours, such railroad company shall pay to the consignee as a penalty for such delay, the sum of one (\$1) dollar per car for each 24 hours, or fraction thereof, in excess of 48 hours consumed in switching, time to be computed from noon of the day of instruction.

"That upon delivery of such property at such new destination, and upon its being placed at a point readily accessible, it shall be the duty of the owner or shipper promptly to release the same as provided in section 2 of this act, or in default thereof pay a penalty for delay, in the same manner as provided in section 2 of this act.

"Sec. 5. That in computing the time as herein pro-

vided Sundays and legal holidays shall not be reckoned against either shippers or carriers, and no consignor or consignee shall be held as being negligent by reason of failure to load or unload when prevented from so doing by stress of weather.

"Sec. 6. That the delay or delays for which the foregoing penalties are provided, shall be deemed to be of the nature of malicious or oppressive wrongs; and that all sums of money herein provided for as payable as penalties, shall be due and payable when demanded, and if any railroad company or shippers or receiver of freight shall refuse or neglect to pay any such sums as may be lawfully payable under this act, the claimants may proceed to recover the same by civil action to which there shall be no defense upon its merits, other than the absolute impossibility of avoiding such delay with proper regard for the safety of life and property, and in case of a recovery of any sum under this act, the claimant shall also be entitled to recover in addition to his costs, a reasonable sum as attorney's fee; and nothing in this act contained or done thereunder, shall be construed to prevent the recovery by such claimant, either in same or a different action, of the further actual damages sustained by such delay, whether for more than 48 hours or less, if due to negligence.

Yours truly,
Cincinnati, Ohio.

MAGUIRE & CO.

THE MOBILE ELEVATOR.

Editor American Elevator and Grain Trade:—The Heidenreich Construction Co., which is erecting the 250,000-bushel elevator for the Terminal Elevator Co. of Mobile, Ala., is rapidly pushing the work to completion, and is ahead of time so far. On May 2 all records were broken for planking in one day, going up 9 feet net, and with yellow pine planking at that. The foremen on top were Bernard Holmes and James Finnegan, T. E. Hill being the superintendent of the work below. One-half of the plankers were negroes. There are 115 men at work.

The foundations for the engine and boiler have been laid. They are of solid brick five feet in depth and cemented with Portland cement, which will render the foundations strictly waterproof. The dimensions of the foundations for the engine are 12x30 feet, while the dimensions required for the boiler are 18x30. There are three steel water-tight tanks. One each will be located in either end of the elevator, and one will be near the center, a distance of about 40 feet from each other. There are 45 piers in the structure. Under each of these piers are 12 pilings, 35 feet in length and 12 to 16 inches in diameter, driven into the ground. These are capped one way with timbers 8x10, and over these crosswise are laid solid planking 4x10. There are four posts, two 12x12, and two 15x12, in each tier, extending from the foundation upward. The conveyor between the elevator and the river will be 600 feet in length, and its capacity for transporting grain from the elevator into the holds of vessels will be 10,000 bushels per hour. This branch of the work is under the supervision of Mr. Jackson.

Superintendent Hill says the elevator when completed will be one of the most modern and complete in the country, and that no elevator in the United States has better cribbing used in its construction than has this one.

Yours truly,
Mobile, Ala.

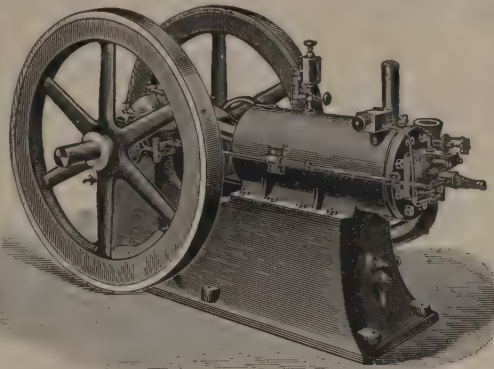
JOHN SMITH.

John Bowen, a young grain merchant of Crawfordsville, Ind., recently eloped with his cousin, Laura Sykes, and the affair came to a tragic end. The lady's parents opposed the marriage and had Bowen arrested, when his young wife attempted to commit suicide by shooting herself in the breast. It is feared she will die.

Chicago has an unsophisticated judge. He is reported as saying that the difference between a board of trade and bucket shop is that one is wholesale and the other retail. Chicago Board should start a kindergarten and invite the learned judge to attend. He might learn the difference between a contract for actual delivery and a mere bet on the price. Board of trade handle hundreds of millions of actual grain annually; they move the crops and bring the producer and consumer together. Every trade made there provides for the actual delivery, but none is expected in a bucket shop, where it is merely a game of freeze out.—C. A. King & Co.'s Circular.

THE CHICAGO GAS AND GASOLINE ENGINE.

The Chicago Gas and Gasoline Engine, which we illustrate herewith, is said to be becoming a favorite among power users on account of the absolutely steady speed at which it runs and its simplicity and durability. It is claimed to be so free from danger that it could not be exploded even if one tried to do it. The manufacturers, the J. J. Norman Co. of 48 South Clinton street, Chicago, spent years in study and experimenting before completing their



THE CHICAGO GAS AND GASOLINE ENGINE.

engine, and claim that they have succeeded in producing a first-rate gas and gasoline motor.

Material of the first quality is employed in the construction of this engine, which is built on the interchangeable plan. The cylinder and base of the small vertical engines are cast in one piece, while in larger sizes the base and crank shaft posts are cast in one piece, and the cylinder separate. The crank shafts have no welds, being made of low carbon tool-steel forged from one solid piece and slotted out, and all of the parts are claimed to be on the same plane of excellence, and made to resist twice the strain that will be put on them. The boxes are bronze, brass or babbitt lined. The valves consist of two direct-acting poppet valves, which need no lubricating or cleaning. The cylinder has sight-feed lubricators, crank shaft boxes, sight-feed oilers and

to 85 pounds per square inch, varying according to the load. The inventor made a careful estimate of the proper proportion of gas and air to obtain the greatest degree of expansive force, and the governor was constructed accordingly. The ordinary hit-and-miss governor can be used if preferred. The engine is said to work as well in cold weather as in warm. The manufacturers call attention to the fact that the receiving and exhaust valves are set so that they cannot be got out of time.

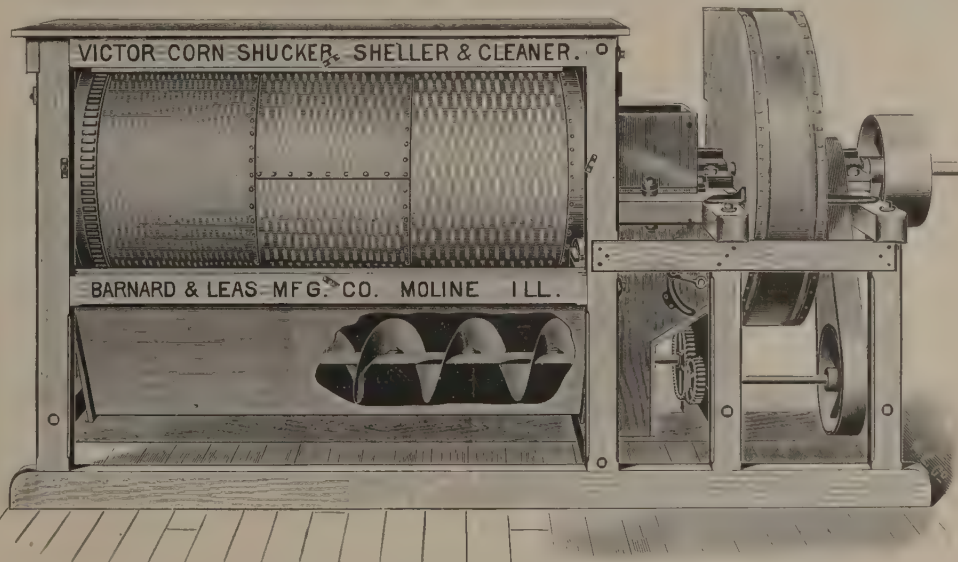
Particular attention is paid to testing the engines before they leave the shops, and this work is carried on under the supervision of the inventor. The Chicago Gas and Gasoline Engines are made in sizes from 2 to 26 horse power or larger when so ordered.

THE VICTOR CORN SHUCKER, SHELLER AND CLEANER.

The growing demand for a machine that will shuck, shell and clean corn at one operation has prompted the Barnard & Leas Mfg. Co. to design a machine especially for this purpose. Several of them are now in successful operation. When the farmers of Mexico have a large crop of corn, they generally store their surplus with the husks on and the farmers of our Southern states find that the husk affords some protection from weevil and other insects, so store their corn with the husks on. Some farmers of Northern corn states crib their corn with the husks on, but they have never attempted to market it in this condition, principally because the grain buyers have no facilities to remove the husks. No doubt many of them will market it in this condition as soon as they learn that elevator men have machines which will remove the husks, and with little labor as compared to that required to do it by hand on the farm.

The general construction of the machine is similar to the Combined Victor Corn Sheller and Cleaner. The apparatus for removing the shucks is combined with the shelling irons. The machine is built very strong. It will not clog or waste corn, and leaves the shelled corn clean for the market.

The wearing parts of the sheller are chilled cast iron, the rolling screen is round and made entirely



THE VICTOR CORN SHUCKER, SHELLER AND CLEANER.

the connecting rod at the crank a solid oil or grease cup.

The cost of operation of this engine is in proportion to the amount of work being done. The manufacturers claim that it will run at a cost of 10 to 12 cents per horse power for ten hours, when the engine is running under load. The gasoline is either pumped to the engine or fed by gravity. The tank may be located in the basement or out of doors. The electric spark or incandescent tube is used for ignition, the manufacturers recommending the latter. An improved governor is used which divides the charge of gas and air as the governor on a steam engine governs the pressure of steam on the cylinder, so that a pulsation is obtained every other revolution with full or partial load, showing a pressure of 15

of iron and steel, thus assuring great durability. The steel shaft is unusually heavy, running in long, well babbitted bearings, which are all in plain sight and where they can be properly cared for. In the passage of the shelled corn from the screen it is subjected to a powerful suction of air from the fan at the head of the machine. It requires but one belt to run it, and can be located anywhere in the building that is convenient. It will work well when located under a dump, and shuck, shell and clean 150 bushels per hour.

The Chicago Grain Receivers and Shippers' Association and the Board of Trade sent delegates to the Grain and Trade Congress which was held at Charleston, S. C., April 29.



Thos. S. Burns has a new brewery at Penn Yann, Pa.

John Kopp intends to erect a brewery at Astoria, Ore.

Geo. W. Wiedenmayer, brewer of Newark, N. J., has incorporated.

The Canton Brewing Co. of Canton, Ohio, intends to erect a brew house.

The Siegler & Schieman Brewing Co. has succeeded C. Mader & Co. of Chicago.

The Gloucester Brewing Co.'s new brewery at Gloucester, N. J., is completed.

Albert Fuhrman has succeeded the Reedsburg Brewing Co. of Reedsburg, Wis.

The Roland Brewing Co. has completed a new brewery at North Bergen, N. J.

Hans Distler has completed and is now operating his new brewery at Hawley, Pa.

The George Keller Brewing Co. of Philadelphia, Pa., intends to erect a malt house.

John Marr has bought from Charles H. Finck the Standard Brewery at Baltimore, Md.

The Lancaster Brewery has succeeded the Lancaster Brewing Co. at Lancaster, N. Y.

James West of Peekskill, N. Y., is reported to be about to erect a brewery at that place.

Otto Euchenhofer, brewer of Dayton, Ohio, has been succeeded by C. H. Frank, assignee.

Martin Blum will rebuild his brewery at Galena, Ill., which was recently destroyed by fire.

Edward Maurara and others have organized a company at Tampa, Fla., to erect a brewery.

Mrs. Magdalena Junk's brewery at Chicago was damaged by fire April 21 at a loss of \$2,500.

Receivers have been appointed for the Heiselmann-Spinner Brewing Co. of Kingston, N. Y.

Adler & Hirsch have succeeded Paul Hirsch & Co., dealers in brewers' rice at New York City.

It is reported that Jacob Kupper and J. Schomer will put up a brewery at Hampton Station, Minn.

Louis House will build a weiss beer brewery at Syracuse, N. Y., to be completed by September 1.

The Haser Brewing Co. has been incorporated at Camden, N. J., with a capital stock of \$50,000.

Reissinger Bros. of Pittsburg have purchased and are operating the Spring brewery at Clearfield, Pa.

The Haser Brewing Co. has been incorporated at South Chester, Pa., with a capital stock of \$50,000.

George Dilger, brewer of Louisville, Ohio, assigned recently, with liabilities of \$16,000, assets \$10,000.

The Suffolk Brewing Co.'s plant at Boston, Mass., was recently damaged by fire to the amount of \$10,000.

It is reported that the company organized at Free-land, Pa., to erect a brewery have abandoned the project.

Kasmaier & Loder, brewers of Columbia, Pa., have dissolved partnership, Mr. Loder continuing the business.

Receivers have been appointed to wind up the business of the Mohawk Valley Brewing Co. of Iliou, N. Y.

Frank P. Miller, of Miller & Kirby, maltsters of Auburn, N. Y., died recently, aged 45 years. He was born in Auburn and has carried on the malting

business there in partnership with his brother-in-law, William M. Kirby, for a number of years.

Oland's brewery at Turtle Grove, Nova Scotia, was destroyed by fire April 26. Loss \$125,000; insurance \$95,000.

The United States Brewers' Association will hold its thirty-sixth annual convention at Philadelphia, on June 3 and 4.

The Harrisburg Consumers' Brewery & Bottling Co. has been incorporated at Harrisburg, Pa., with a capital of \$75,000.

The James Hanley Brewing Co.'s brewery at Providence, R. I., was recently damaged by fire to the extent of \$20,000.

C. Stegmaier & Son of Wilkesbarre will erect warehouses and other additions to their brewing plant at Plymouth, Pa.

It is reported that John Kerr and others of Jeanette, Pa., have bought a site and will erect a brewery at Bradford, Pa.

The brewing firm of Stallmann, Berg & Haug of Ferdinand, Ind., has been reorganized, Stallmann, Haug & Haug succeeding.

The National Brewing Co. of Chicago will erect additions to its plant, consisting of brew house, mill house and other buildings.

The John Kurth Brewing Co. of Columbus, Wis., is building a new malt house which will double the company's present capacity.

The Francis Fritsch Mfg. Co. of Cincinnati, Ohio, have purchased the Huntington Brewing Co.'s plant at Central City, W. Va.

Oland's brewery at Turtle Grove, Dartmouth, N. S., was destroyed by fire. The loss was about \$125,000; insured for \$95,000.

The malt house of the H. Grone Brewing Co. at St. Louis, Mo., was recently damaged by a fire which entailed a loss of \$5,000.

Joseph Wolf, brewer of Stillwater, Minn., has organized a company to carry on his business under the name of the Joseph Wolf Co.

The firm of Roemer & Peshek, brewers of New Prague, Minn., have dissolved partnership, F. Roemer succeeding to the business.

A company has been formed by Ernst Fecker and others, who have purchased the Cold Springs Brewing Company's brewery at Naperville, Ill.

The Excelsior Brewing Co. has been incorporated at Brooklyn, N. Y., with a capital stock of \$300,000, to succeed the Fred. Hower Brewing Co.

Emil Raddant, brewer of Shawano, Wis., is building a storage house and ice house after plans made by the Wilhelm Griesser Engineering Co. of Chicago.

The John Kruth Brewing Co. of Columbus, Ohio, are duplicating their malting plant after plans made by the Wilhelm Griesser Engineering Co. of Chicago.

William Crumpton is handling the barley business of the Superior Terminal Storage Co. at Superior, Wis., taking the place of A. Le Clair, who resigned recently.

The Montgomery Brewing Co.'s brewery at Montgomery, Ala., was recently sold at public sale for \$45,000. The plant originally cost about \$200,000.

A New York house purchased at Chicago, April 24, a few cars of fair barley to be shipped to South Africa, and it is said that if the shipment proves satisfactory it will be followed by others. This is

an unexpected source for an inquiry for barley, and is the first glimpse of an export demand the barley trade has had for a long time.

Craft & Caldwell, maltsters of Batavia, N. Y., have dissolved partnership and the business has been purchased by Mr. Craft, by whom it will be conducted.

The grain dry kiln of the old Midland Maize Milling Co. at Milwaukee, Wis., which is now operated by E. P. Mueller for drying brewers' grains, was slightly damaged by fire April 19.

According to advance sheets of the Year Book of Australia there were 132,361 acres of barley under cultivation in the season of 1894-95, the yield for the season being 2,236,512 bushels.

The Kuebler Brewing & Malting Co. and the Stang Brewing Co. of Sandusky, Ohio, have consolidated with a capital stock of \$700,000, under the name of the Kuebler-Stang Brewing & Malting Co.

The malt house of the Hinchcliffe Brewing Co. of Paterson, N. J., was destroyed by fire on the night of May 11, together with 300,000 bushels of grain. Estimated loss \$125,000; insurance \$75,000.

Charles Strangman and J. M. Leicht have purchased Geo. V. Muth's brewery at Cleveland, Ohio, and it is said that they will organize a company to operate it after remodeling and improving the plant.

The Oland Brewery at Dartmouth, N. S., belonging to the Halifax Breweries, an English corporation, was destroyed by fire April 26, together with warehouses and a large quantity of stock. Loss \$90,000 to \$100,000.

The Huntley Manufacturing Co. of Silver Creek, N. Y., has issued a neatly printed illustrated pamphlet addressed to brewers and maltsters, setting forth the advantages of its Monitor Dustless Malt Cleaning, Polishing and Separating Machine. It is designed to handle and thoroughly clean malt as it comes from the kilns. There are also a number of testimonials from users all over the country, attesting its popularity.

According to the last report of the Bureau of Statistics barley malt aggregating 658 bushels, valued at \$576, was imported in March, against none in March, 1895; and in the nine months ending March 3,802 bushels, valued at \$3,407, were imported, against 8,397 bushels, valued at \$5,097, imported in the corresponding nine months of 1894-95. Of imported barley malt we exported none in March, and none in March, 1895; there was none exported in the nine months ending March, and 259 bushels, valued at \$225, were exported in the nine months ending March, 1895.

The substitution of corn for barley in the production of beer has reached such enormous proportions that it has been made the subject of a bill introduced in Congress by Representative Cooper, requiring manufacturers and retailers to keep in a prominent place signs notifying their customers that the product they make and sell is adulterated. It is a move in the right direction, and deserves the support not alone of those producing barley, but the consumers of the product as well. Farmers and shippers might help expedite the bill by writing their views to their respective Congressmen and Senators.—Commercial Record, Duluth.

CHICAGO BARLEY GRADES.

The rules governing the grading of barley at Chicago are as follows:

No. 1 Barley.—Shall be sound, plump, bright, clean and free from other grain.

No. 2 Barley.—Shall be of healthy color, not sound and not plump enough for No. 1, reasonably clean and reasonably free from other grain.

No. 3 Barley.—Shall include slightly shrunken and otherwise slightly damaged barley not good enough for No. 2.

No. 4 Barley.—Shall include all barley fit for malting purposes not good enough for No. 3.

No. 5 Barley.—Shall include all barley which is badly damaged, or from any cause unfit for malting purposes; except that barley which has been chemically treated shall not be graded at all.

The grades of Nos. 1, 2 and 3 Scotch barley shall correspond in all respects with the grades of Nos. 1, 2 and 3 barley; except that they shall be of the Scotch variety.

The grades of Nos. 1, 2 and 3 Bay Brewing barley

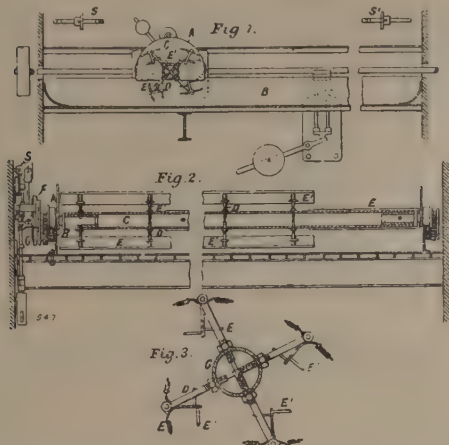
shall conform in all respects to the grades of Nos. 1, 2 and 3 barley; except that they shall be of the Bay Brewing variety grown in the territories and on the Pacific Coast.

The grades of Nos. 1, 2 and 3 Chevalier Barley shall conform in all respects to the grades of Nos. 1, 2 and 3 barley; except that they shall be of the Chevalier variety grown in the territories and on the Pacific Coast.

The word "new" shall be inserted in certificates of inspection of a newly harvested crop of barley until the first day of May of each year.

A MALT TURNER.

A patent has been granted by the British patent office to C. E. Mumford of Lavenham for an appa-



atus for turning malt on a kiln floor as is shown in our illustration.

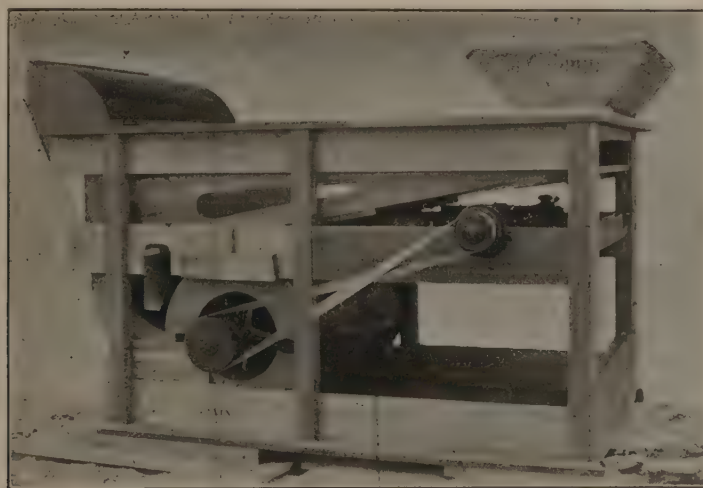
A pair of carriages A are arranged to run on rails at each side of the kiln and these carriages form bearings for the two ends of a revolving shaft C, which extends across the kiln. On this shaft there are fixed at intervals radial arms D, to the ends of which are pivoted blades E that can swing upon their pivots to a certain extent either way as determined by stops E', upon their meeting the arms D, to which they are pivoted. These blades are of such length, and the intervals between the sets of arms are such that, as the shaft

tubular shaft C, so that as this shaft revolves both carriages are caused to travel along the kiln lengthwise. The carriage which carries the gear for driving the tubular shaft C has reversing gear, consisting of a sleeve sliding on a feather of the shaft G, so that its clutch end can engage with the one or the other of the bevel pinions which are loose on the shaft G. When a lever mounted on the carriage meets a stop S at the end of its travel in the one direction, this lever is moved so as to move the clutch sleeve Q, effecting reversal of the direction of rotation of the tubular shaft C, and thereupon the carriages travel in the opposite direction till reversal is effected by the lever meeting another stop.

THE CLIPPER GRAIN, SEED AND BEAN CLEANER.

The Clipper Grain, Seed and Bean Cleaner, which is manufactured by Ferrell, Prame & Ozier of Saginaw, Mich., is said to be particularly well adapted to the use of country elevators, for a receiver or recleaner for all kinds of grain and seeds. Peculiarity of construction allows its use on different grains or seeds, and the manufacturers claim that it will satisfactorily clean wheat, corn, rye, oats, barley, beans, flax, all kinds of clover, millet, mustard and timothy. It will doubtless be of interest to grain men, especially those operating country houses.

There are two special features in the force feed hopper designed to give a positive and regular flow of grain without requiring the attention of an operator, and a double air drum producing an even blast. In order that the proper draft can be secured for the lightest or heaviest grain or seed the fans are arranged so that they can be given six changes of speed. An opening in the shoe gives access to the lower sieve while running. There is a graded set of sieves for the different grains and seeds, a sieve for removing mustard seed from oats, and special screens for flax and beans. The machine is made of selected material with steel shafting and double eccentric shake. It is said to have a capacity of cleaning 450 bushels of grain per hour, or 150 bush-



THE CLIPPER GRAIN, SEED AND BEAN CLEANER.

revolves, the floor of the kiln is swept by the blades throughout its whole width. The blades are so formed that as they swing round they lift the material, and then, turning partly over, drop it, thus turning it over on the floor. The arms are fixed to the shaft in an adjustable manner, and the blades E are preferably edged with leather or other yielding material, which by the proper adjustment of the arms is made to scrape the kiln floor.

The shaft is caused to revolve by a bevel wheel F on it gearing with a pair of bevel pinions on a longitudinal shaft G extending along one side of the kiln, and supported on bearings H, which are moved out of the way as the carriage passes them. The rails B have their undersides toothed as racks engaged by pinions P, which are geared to the

els of flax or other seeds, and it requires but one horse power to run it.

Davis' Grain Tables give the value of any amount of grain or produce weighing 32, 48, 56 and 60 pounds per bushel, and many other things of value to grain dealers. It will be sent with the "American Elevator and Grain Trade" one year for \$1.50.

On May 4 the United States Supreme Court rendered decision in the case of the Western Union Telegraph Co. versus D. J. James, involving the right to exact penalty from a telegraph company by reason of non-delivery of messages. The case was appealed from Georgia, where the decision was favorable to this claim, and the Supreme Court affirmed it.

QUERIES: AND: REPLIES

[Questions and answers are inserted under this head free of charge, and all are invited to avail themselves of this column.]

No. 23. Addresses of Reputable Builders Wanted.

We wish to build a small elevator at another station, and would like to get the address of a reputable firm which makes a specialty of country elevators.—LEIGH & MOORE, Radcliffe, Iowa. [Ans.—Consult the advertising pages of this issue of the "American Elevator and Grain Trade."—Ed.]

DOTS. AND. DASHES

When Uncle Sam interviews some of the "irregular" trading houses, and refuses them the use of the mails, outside parties will await the return of their money very anxiously.

Chinch bugs are reported to be putting in an early appearance all over Central Illinois, in some sections in large quantities. They are looking for something else besides the crop liars.

In the case of the Fergus Flour Mills of Fergus Falls, Minn., against the Western Union Telegraph Co., in which damages were sought for the delay of a message, verdict was recently rendered in favor of the plaintiff for \$138.

Lister Andrew, until last October a grain dealer of Rossville, Ill., was indicted by the grand jury for selling grain stored in his elevator which did not belong to him. But Andrew disappeared and was not found until April 10, when he was arrested at Cicero, near Chicago, and taken back to stand trial. He is out on bail.

G. F. Sunwall & Co., grain commission merchants of Minneapolis, have brought an action against H. S. Judson to recover \$450 which they allege they loaned the defendant in March on the representation of Judson that he would ship to them a certain amount of wheat and oats which he said he had at Morris, Minn. The plaintiffs allege that Judson did not own any wheat or oats at the time.

The Grain Committee of the Cincinnati Chamber of Commerce recently gave its decision in the case of C. Klein & Co., flour and feed merchants, against Gale Bros. Mr. Klein complained to the committee that when he received the bran it was not like the sample or what the seller represented it to be; but the committee decided that the bran was up to standard and ordered Mr. Klein to keep it.

"One of my neighbors has made a remarkable discovery," writes C. J. Norton in the Journal of Agriculture. "A year ago he tested corn that had been soaked with coal oil in his greenhouse, and afterward repeated for 30 hours. All germinated, while a longer time caused a small per cent. of loss. Seed corn thus treated does not swell as it would in water, and after draining will readily run through the planter. In tests on clover sod last year, seed thus treated was not at all injured by cutworms or grubs, while the seed not treated was dug up by squirrels, destroyed by cutworms, etc. But the most remarkable thing of all was that chinch bugs let the corn that had been thus treated entirely alone."

"The lesson of the spring grain fleet at Buffalo so far," says the Marine Record, "is that it takes good grain as well as good vessels to store any grain, especially corn, afloat during the winter. When the Chicago fleet started out it was said that there would be very little difficulty with it, for the vessels were A1; and so it proved, for with the exception of the 21,000 bushels wet by the broken pipe on the barge McLachlan there has been very little wet grain. The trouble is that the corn was often out of condition when it was loaded. This ought to release both vessel and insurance people from liability." Yes, if they can prove that it was out of condition when placed in the vessel. The last crop of corn was very dry, and if the vesselmen, in their eagerness to secure a cargo, lost sight of its quality and accepted rotten stuff, it is now too late to kick.



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., MAY 15, 1896.

No elevator man who leases land from a rail carrier can legally release that carrier from liability for damages caused to his elevator by sparks from a passing locomotive. The courts have decided that it was contrary to public policy.

The flaxseed trade of Chicago was much agitated lately over an appeal from the department's grading of seven cars of flaxseed taken from store for shipment. The grading was sustained, but the trade was so dissatisfied with the quality of the seed that the market fell two cents. The rules will probably be amended so as to require seed of a better quality in the contract grade.

An Iowa elevator owner went to the agent of an insurance company and arranged for insurance. The elevator burned before the policy had been issued or the premium paid. The company declined to pay, but the Supreme Court of the state says that it must, as the verbal contract was sufficient. But while a verbal contract is good, a written contract is a great deal better.

The three regular elevators of Armour & Co., on the line of the C., M. & St. Paul Ry. in Chicago, have been declared irregular by the Board of Trade Directors. These houses have a combined capacity of nearly 6,000,000 bushels, and are operated as one plant. By transferring grain from one house of the plant to another and dating the new receipts so that those to whom they were given would have a shorter time than usual to dispose of them before additional storage would be due, the elevator proprietors were able to squeeze another one-fourth cent storage charge out of a number of traders.

The transfer was made without reinspection, so was considered an irregular practice in more ways than one.

The arbitrary rate of 20½ cents recently granted by the Rock Island Railroad on corn from the Mississippi River to the seaboard has caused considerable talk and someone may get into trouble before the matter is settled. There has been so much double dealing in connection with it that someone may get into deep water.

The grain trade of Manitoba seems to be suffering severely from lack of organization. It is so helpless that even the government grain inspectors have the temerity to confiscate what is left by the rail carriers and the shipper is lucky if he is not presented with a bill from the consignee for balance due for freight. The rate-maker of the Canadian Pacific Railway seems to have changed that old motto of the rail robbers from "all the traffic will stand" to "charge all the freight is worth."

Some Kansas City shippers who have secured discriminating rates by falsely reporting the weight of their shipments are in very hot water just now and they sincerely wish they had not done so. Several have been indicted for violating the Interstate Commerce Law and may be heavily fined and imprisoned. The guilty ones who have not been indicted are very uneasy and some have gone on extended vacations. When they return they will be more careful about violating the law.

Down in Ohio a couple of elevators belonging to a railway company took fire from locomotive sparks and were destroyed. Suppose they were insured. Ordinarily the insurance companies would pay the loss and subrogate under the policy and make the railroad stand the damage. In this instance they would have to settle with railroad company and then sue it. Or could the insurance companies decline to pay on the ground that the railway had negligently fired its own premises? Or would they simply pay the loss and say nothing; and if they would, why should they ever subrogate under a policy on other property destroyed this way? We give it up.

The Grain Dealers' Association of Southwest Iowa and Northwest Missouri, which is the youngest of the grain dealers' organizations, has already done considerable in the interests of its members and is gradually growing. A vigorous effort is being made to secure new members and enlarge its field of usefulness, and naturally it is getting stronger every day. The dealers of the section covered by this Association should show their appreciation of the efforts of the promoters of this organization to advance common interests, by giving it their active support. There is plenty of work for the Association to do, but unless the officers have the hearty co-operation of a large number of dealers, little can be accomplished. The dealers of that district have a splendid opportunity to promote the interests of their business and relieve it of the abuses which incubate it.

KANSAS TRACK SCALE LAW UNCONSTITUTIONAL.

The Kansas law requiring rail carriers to put in track scales at points from which 100 carloads of grain has been shipped the preceding year has been decided unconstitutional, because the body of the law did not agree with the object stated in the title. The grain dealers of Kansas expended much time in securing the enactment of this law and it is to be regretted that their efforts to secure a clean bill of lading have proved ineffectual. However, it is doubtful that it could have been made applicable to interstate shipments. A clean bill of lading can be secured by national legislation. The railroads cannot be expected to grant it, because such action would be nearer to a just and fair policy than they dare venture. If all the grain shippers of the country would make a stand against the present bill of lading and refuse to accept any but a clean bill, the rail carriers would soon come to time.

PROHIBITING GRAIN SPECULATION.

The German agrarian party has won a victory in the passage by the Reichstag of a bill that is expected to put an end to speculative dealing in grain. The evident scope of the bill is not only to prohibit trading in "privileges," but to prevent the sale of grain and flour for future delivery altogether. The bill must be approved by the German Federal Council before it becomes a law. Should it meet with this approval, it will become a law next month. Opinions vary as to the probable action of the Council, some inclining to the view that the law will not be sanctioned on the ground of interfering with existing commercial treaties.

Of course this law is the outgrowth of a belief that speculative trading in grain and flour tends to depress prices. The agrarians believe that even bona fide contracts for future delivery are against the interest of the farmer. In their view the best price will be realized for agricultural products when the market is made by present requirements. It is easy enough to follow the line of argument against short selling, whether one believes it or not; but most people will find it difficult to understand how the kind of a market the agrarians want will make prices high. The world is no longer on the verge of starvation. The bull argument is always the prospect of future scarcity. If we understand the program of the agrarians correctly, they want the sort of a market which prevailed, say, forty years ago, when fluctuations in price in the same locality between harvest and seeding were often surprising, and when prices in different localities were apparently governed by local supply only. Speculative dealing has tended to equalize prices and make the grain market a strictly cash one. Were potatoes susceptible of being carried in a speculative way, no such fluctuations in prices as have occurred the past two or three years would be possible. In some localities potatoes have not been worth 10 per cent. of last year's prices. Could potatoes be kept as well as grain, the capital would be forthcoming to carry them. They would not bring fairly good prices in some localities and only a few cents a

bushel in others, as has been the case, were they a speculative commodity like grain. While the prices would never go as high as they occasionally do, they certainly would never go so low as to be given away, as they have been in some instances.

If this German anti-option bill becomes a law it will be interesting to watch its effect on grain prices. The experimenting can be done at the expense of the experimenters and the result will show the wisdom or unwisdom of the measure. Speculation of course will be driven from the German cities to Antwerp, Brussels and Amsterdam, and already German brokers announce that they will speculate for customers on the New York and Chicago markets. Interested parties outside Germany can well afford to hope the Reichstag bill will become a law and be given a trial. It will be an object lesson in the exact effect speculation has on prices.

A SUCCESSFUL FIGHT FOR FAIRER RATES.

It is decidedly encouraging to note that the three grain dealers of Manson, Iowa, whose petition for reasonable rates was told of in a communication in our April number, have finally succeeded in bringing the Illinois Central Railroad to time and secured the promise of rates which will place them on an equal footing with dealers in neighboring towns who ship over other lines.

It is a little late for the dealers to get much of the 1895 crop, but it paves the way for a busy season at their elevators during the marketing of this year's crop. If grain dealers who suffer like abuses would always stand together and work earnestly to secure a remedy, the entire trade would be more prosperous and would not prove such an inviting mark for every carrier looking about for prey. Jealousy and suspicion of one's competitors cannot be tolerated in a fight against a common foe.

WILL SUE FOR EXCESS CHARGES.

The railroads crossing Iowa have an extremely sharp thorn in their sides which may soon cause them much pain and the loss of some blood which they have illegally exacted from grain shippers of Northwest Iowa. The movement to sue them for the amount of freight charged in excess of what the Interstate Commerce Commission decided was reasonable is gaining strength daily, and the Grain Shippers' Association is growing accordingly.

The claims for excess charges paid by the grain shippers since 1890 are very heavy, and suits will be filed against several roads soon. The Commission held that rates on coarse grain, to be reasonable, should not exceed 17 cents from Missouri River points to Chicago, and 12 cents to the east bank of the Mississippi River, and not more than 15 cents on wheat. The railroads recognized the authority of the Commission and reduced the rates for a short time, but their greed soon got the better of them and they advanced them.

Over 100 of the shippers of Northwest Iowa have combined to recover the excess and their success seems to be assured without much expense. We have not learned whether the individual firms have applied to each carrier for

the return of the excess charges, but it would seem policy to do so, as each would then have better cause for bringing suit. The association has been very successful in former suits brought to recover excess charges, and the experience of those suits will prove of material advantage to the managers in pushing the present suits. Shippers of that district who have been charged in excess of the reasonable rates established by the Commission should promptly join with the Association and seek to recover.

KANSAS CITY INSPECTION.

The grain inspectors at Kansas City, Mo., and Argentine, Kan., seem to be giving anything but satisfaction. The millers are kicking vigorously and persistently against what they claim to be the careless grading of the Kansas City force and are seeking to secure a rigid enforcement of the rules. The Kansas City department established a reputation for carelessness several years ago, when wheat was inspected by telephone, but until recently few complaints of its inefficiency have been made public. The department seems to have been afflicted with politics, nepotism and laziness, but the recent trouble will no doubt make everyone connected with it more careful for a time at least.

The Argentine inspector is charged with utter incompetence and the State Inspector in Chief has attempted repeatedly to remove him, but in vain. The grain dealers who ship to these markets are vitally interested in having competent men entrusted with the grading of grain, and should work together to secure it. Self interest should have prompted them to take such action long ago.

RECIPROCAL DEMURRAGE IN OHIO.

The Grain, Hay and Feed Receivers' Association of Cincinnati has made a vigorous fight for a reciprocal demurrage law, and finally succeeded in inducing the committee to report favorably House Bill 867, which is published in our communicated columns. The bill will be taken up at the next session of the Legislature and if the grain dealers of the state will but do a little work with the representatives, no doubt remains regarding the passage of the bill.

The bill is a good one so far as it goes, but it falls far short of the regulation needed by every grain shipper. The bill provides that shippers and receivers shall pay \$1 for each 24 hours or fraction they delay a car in excess of 48 hours; also that rail carriers shall pay \$1 for like delay at initial point or destination. No provision is made for delay in transit, which is a constant source of loss to every shipper. The delay not only causes him to lose the use of his capital and the interest on it, but frequently it also subjects him to a heavy loss owing to a decline in the market. Another objection to this exception is that it leaves the way open for carriers to ignore the spirit and the letter of the law and avoid the regulations provided for the switching of cars at points of destination. Whenever a carrier's yards at any point become blocked with more traffic than it can handle promptly, it will detain the freight billed to that point at an intermediate station and thus avoid being called upon for demurrage. This defect

in the law may seriously affect the interests of the receivers.

As few of the railroads in Ohio have facilities at country stations for receiving and delivering freight (grain or any other bulk freight) in carloads, some might seek to escape liability on that account. A reference to their charter would show that it would be necessary for them to provide such facilities.

A commendable clause at the close of the bill provides that nothing in the act shall be construed to prevent the recovery by the claimant, either in the same or a different action of further actual damages sustained by the delay. Without this the law might prove a bar to all other actions after suit for demurrage had been commenced under it. The trifling demurrage charge cannot offset the heavy loss caused shipper or receiver, but it will serve to make all carriers prompt in furnishing cars and in switching them to unloading track when they have once arrived at destination. The bill is a step in the right direction and should have the hearty support of every Ohio grain dealer.

SHORTAGES.

The shortages in grain shipments are not as numerous or as large as of yore, but only a few of those who were determined to do away with private weighmen at Chicago are still standing out for official weights. The enactment of a state law providing for public weighmen at grain centers would go far toward remedying the trouble. Minnesota has such a department and dealers shipping to the markets of that state have less trouble with shortages than in any other. Minnesota also has a scale expert and a superintendent of country elevators who investigate complaints. One of their recent reports is of a country elevator which had a small hopper scale for receiving and a large one for loading out. Each scale when loaded would bind on its casing so as to make it impossible to weigh correctly. The scale with which the dealer weighed the farmers' grain made him pay for 25 pounds not received each time and the shipping scale was out even more. Before yelling, find out whether you are suffering at the hands of the scalemaker or the terminal elevator man.

The other day a case came up before Judge Gibbons in Chicago in which a party deposited \$3,000 in securities with a Board of Trade broker to secure margins. The market went against him and he filed a bill in chancery to compel the broker to return his securities on the ground that the deals were gambling transactions. The judge decided that the deals were bona fide and should stand. "It is bad public policy," said the court, "to permit one to go into a gambling place or a gambling transaction and win money and then pocket it, but if he loses give him the opportunity to come into court and demand its return. Although the legislature has passed a law which permits a gambler to do this, it is vitiated public policy."

The Grain Dealers' Association of Southwest Iowa and Northwest Missouri will meet at Council Bluffs, Iowa, at 7:30 p. m., June 16. Every dealer of the association's territory should make it a point to be present.

EDITORIAL MENTION

A sure cure for shortages—a clean bill of lading.

Schumacher, the oatmeal king, has failed, and the oats crowd is no longer gossiping about his long line of oats. Some other fiction may soon take its place.

The grain shipper who does not kick vigorously every time a shortage occurs in his shipments, by his toleration encourages the imposition of larger shortages and greater abuses.

The spring styles of crop reports are unusually varied this season. In fact, they are so various and contradictory that one must be very hard to please who cannot find plenty that suit him.

Some of the crop reporters have stretched their imagination so frightfully in compiling reports of chinch bugs that we doubt not they will soon have muscardine or chinch bug fungus on the brain.

The grain trade suffers more at the hands of the rail carriers than those engaged in any other line of business. Why? Because its members are not organized, and as individuals are too weak to offer any resistance.

Heavy wire screens placed over your cupola windows will protect your window panes from stones and other missiles and will keep out pigeons, sparrows and sparks. It may save your elevator from destruction by fire.

The grain shipper who has his bills of lading marked "Freight C. O. D." will not have to pay the freight even if the consignee fails or swindles the carrier out of the charges. It is a precaution that costs nothing and may save much.

Ohio grain dealers should talk with their representatives in the State Legislature regarding House Bill 867, which is published in full in this number, and use their influence to secure its prompt passage upon the reassembling of the Legislature.

When there is anything new in the grain trade we want to know of it. We cannot be everywhere, but our readers are, and they will confer a favor upon their brother dealers as well as ourselves by sending us the news of their districts.

A troublesome question is constantly coming up in regard to the assessment of grain in warehouses and cribs. Such is the case with some of the corn bought in Iowa last fall and winter by Chicago and Eastern parties and cribbed at the railway stations. The assessors have included it in their assessment rolls and are sustained by the attorney general of the state. The matter will be tested in the courts.

The owners are non-residents and we presume the claim will be that the property is in a state of transit.

The Daily Sensation of St. Paul has evidently run short on lies, as it has not manufactured a scandal in the grain trade for a week, and the farmers of the Northwest seem to be getting just as fair prices for their grain as ever. Can it be that the imagination of its reporter has given out?

None of the railroad companies have recently shown the fair-minded spirit needed to pay a fair compensation to those who erect special depots for bulk grain along their tracks and load it into cars without charge. They seem to forget that their charters require that they shall provide depots for the receipt and shipment of all kinds of freight.

The Grain Dealers' National Association will be organized just as soon as members of ability determine that the trade shall be pulled up out of the swamp. It will take much time and hard work to scrape off the barnacles which now encumber it, but it must be done if the trade is to progress.

One of the big shippers cheerfully says that the days of rebates are over, and that the man who accepts a rebate now faces a different state of affairs than before the last decision of the Supreme Court. If discrimination is at an end a great reform has been accomplished by rather unusual means—a court decision. But we hope it really has.

An Oregon elevator man recently discovered that someone had cut a hole in the bottom of one of his wheat bins and taken considerable grain. He has since made the basement of his elevator burglar proof and hereafter he will keep a closer watch on his property. If elevator men would keep a closer watch on their grain and provide even ordinary facilities for locking it up they would not suffer so often at the hands of pilferers.

Why not let the college boys settle the tariff and silver questions? A year ago Mr. Lubin offered prizes to the amount of \$250 to be awarded in prizes for essays on "The Agricultural Depression and its Remedies." The competition was open to all the students in the state universities of Michigan, Wisconsin and Minnesota. The prizes have been awarded and after the essays are published we suppose the agricultural depression will have the good sense to come to an end and give the sophomores a chance to settle some other burning questions.

Murry Nelson has lost his suit against the Chicago Board of Trade for reinstatement. About two years ago, when the elevators signed an agreement with the Board of Trade in regard to charges, the National Elevator and Dock Co., of which Mr. Nelson is president and chief owner, also signed through its secretary. Mr. Nelson was out of town and when he returned promptly repudiated the agreement. The Board tried him for unmercantile conduct and suspended him for ten years. He sued for reinstatement and was defeated in the

Superior Court. He appealed to the Appellate Court and was sustained. Then the Board appealed to the Supreme Court and now the Board is sustained. Mr. Nelson is a fighter and declares that the case is not through with yet.

A bill has been introduced in Congress providing for that much desired uniform classification of freight, and what is more, the National Transportation Association is working to secure its passage. With uniform classification a grain shipper might be able to determine the rate on a shipment via several roads from the tariff sheets which are now such confusing puzzles. Shippers would not then be so dependent upon carriers' agents for the amount of the through rates and would not be required so often to pay a rate higher than they expected, as the opportunities for error in computing through rates would be minimized.

The Danish Parliament is considering, and with favor, a bill providing for the introduction of the metric system of weights and measures in Denmark. If the United States does not hurry up it will be the last to discard misfit weights and measures which vary in amount in different localities. The metric system is the simplest ever devised and it is used more extensively than all others combined. It is only a question of a short time when the United States must adopt it and the sooner it does so the more will the people profit. It will be especially advantageous for our exporters and will simplify and facilitate all computations.

A subcommittee of the House Commerce Committee has drafted a bill providing for the reorganization of the Nicaragua Canal Co. and the issuance of \$100,000,000 3 per cent. bonds to be guaranteed by the government. The government's expensive experience in guaranteeing Pacific railway bonds should be enough to satisfy it. It is acknowledged that it will cost several times a hundred million to construct the Nicaragua canal and no doubt the government would be called upon to advance the extra amount in order to complete it. When completed the grain trade or no other trade would profit enough by the short cut across the isthmus to pay the extra expense.

According to the report of the Bureau of Statistics breadstuffs valued at \$9,270,147 were exported in April, against an amount valued at \$9,339,187 exported in April, 1895; and during the ten months ending April breadstuffs exported were valued at \$111,958,796, against an amount valued at \$89,334,881 exported in the corresponding ten months of 1894-95. Exports of grain in April, compared with those of April, 1895, in bushels, were as follows: Wheat, 2,941,581 against 5,262,125; rye, 66,638 against 27; oats, 2,111,110 against 30,430; corn, 6,528,946 against 3,863,135; barley, 917,748 against 138,060; and the exports for the ten months ending April were: Wheat, 49,969,010 against 64,435,478; rye, 399,667 against 8,879; oats, 5,629,300 against 440,200; corn 77,302,863 against 18,270,344; barley, 5,625,749 against 1,417,909. In the same ten months there were exported 44,673,356 against 41,885,782 barrels of flour, 33,441,783 against 16,495,054 pounds of oatmeal,

236,594 against 180,054 pounds of oatmeal, 236,594 against 180,597 barrels of cornmeal, during the same time of 1894-95.

The Orange Judd Farmer has been taking a poll of its readers on a number of questions and among them as to how they stood on the question of a government bounty on exports of agricultural products. The farmers were against the proposition two to one. It will be a grief to Mr. Lubin to know that the farmers themselves oppose his great scheme for helping the agriculturist. Perhaps the farmer has thought the subject out and concluded that the export bounty would in reality be paid to the foreign consumer and we guess he is about right.

If a grain shipper were to take \$1,000 to an express agent for transportation to a distant point, and the agent gave him a receipt reading "about \$1,000" he would immediately refuse it or return it and demand his money, but when that same shipper gives the railroad company 1,000 bushels of wheat he accepts a receipt for "about 1,000 bushels" or for "one car said to contain 1,000 bushels." Submission to such rank abuses serves to whet the desire of the traffic managers for greater imposition. The grain shippers of the country seem to enjoy being robbed and kicked at every turn by the carriers, for they peacefully submit to all the old ones and seldom kick against new ones. Every shipper is entitled to a clean bill of lading and many get it, but grain shippers never will until they make a fight for it. A clean bill of lading would throw the burden of shortages upon the carrier and insure better cars and greater care of grain in transit.

Trade Notes

He belonged to a crack rifle corps,
And was owner, likewise, of a storps
Where, by shrewd advertising,
He was soon realizing
A fortune that grew morps and morps!

Foley & Smith will erect works for the manufacture of gasoline engines at Hickman, Ky.

F. P. Seeger has taken charge of the Minneapolis office of the Howes Grain Cleaner Co. of Silver Creek, N. Y.

Stuart Hare of Kansas City, Southwestern representative for the Frost Mfg. Co., recently received the contract to furnish the power plant for C. E. Jackson's elevator at Corning, Kan.

James Pye, agent in the Northwest for the Nordyke & Marmon Co., has removed his office at Minneapolis to 311 Third street, S. He also has warehouses and will carry a line of machinery in order to fill small orders quickly.

The Charter Gas Engine Co. of Sterling, Ill., is putting up a new building 65x60 feet, two stories high. It reports trade excellent and is erecting the new building to increase its capacity to meet the demand for its popular engine.

The firm of W. J. Clark & Co., manufacturers of the Salem Elevator Bucket, has recently been incorporated under the laws of Ohio, under the name and style of the W. J. Clark Company, with a paid up capital of \$100,000. There is to be no change in the line or management of the business, except that with their greatly enlarged plant and improved facilities the new company will be able to execute orders for buckets or for sheet and plate metal work much more promptly than heretofore and

thereby enlarge the business very considerably. W. H. Clark is president and treasurer. W. J. Clark is vice-president and business manager.

T. M. Van Horn now has charge of the Indiana agency of the Barnard & Leas Mfg. Co., with an office in the Board of Trade Building, at Indianapolis. Mr. Van Horn has been with the Barnard & Leas Co. several years, and is a well-known engineer and miller.

The Webster Mfg. Co. of Chicago has issued its special catalogue No. 3 of the Improved Webster Gas and Gasoline Engine of the 1896 pattern. There are several illustrations of the company's works, and of the engine, together with general information regarding the use of gas engines.

The National Association of Manufacturers, which is headed by some of the best business men of the country, is working for the passage by Congress of the bill providing for the establishment of a Department of Commerce and Manufactures, which is now in the hands of the Committee on Commerce.

The Search Manufacturing Company has been incorporated at Sheboygan Falls, Wis., for the manufacture of horse powers, grinding mills, feed cutters, etc., under late patents. A plant will be erected at once. The officers are: President, C. F. Search; vice-president, R. Ziebell; secretary and treasurer, George A. Robbins; directors, C. H. Weisse, J. J. Robbins, A. A. Wachter, C. W. Pfeifer and A. O. Heald.

The H. Channon Co. of 24-26 Market street, Chicago, has issued its treatise on rope transmission, which will be sent to readers of the "American Elevator and Grain Trade" upon application. Rope driving has come into prominence as a factor in power transmission in recent years, and it will undoubtedly be read with interest by engineers and manufacturers everywhere. To employ rope driving successfully proper conditions are required, and the correct principles of design and construction must be observed. These points are explained with suitable tables and illustrations. The general catalogue of the H. Channon Co. is ready, and they will be pleased to send copies to firms interested in their line.

James Stewart & Co., elevator builders of St. Louis, Mo., recently won an important suit. In 1893 Stewart & Co. erected at Buffalo, N. Y., the Eastern Elevator for Graves, Northrup & Lee, on a contract for \$268,000. All but \$30,000 of this was paid, when Graves, Northrup & Lee began suit for \$72,000, alleging they had suffered damage by delay in completing the work. There was no provision in the contract for a penalty in case of delay. Stewart & Co. set up the defense that the work had been hindered by defects in the title to the site, changes in the construction, and alterations in plans, so as to provide for three towers instead of two, thereby increasing the receiving capacity of the elevator from 30,000 to 45,000 bushels an hour. Stewart & Co. entered suit in the Federal Court at Utica in 1895 for \$30,000, and had the first suit transferred to the Federal Court. The two cases were joined, and the jury awarded \$30,000 to Stewart & Co., disallowing the claim of Graves, Northrup & Lee. The case was appealed to the United States Supreme Court, the judgment of the Federal Court being affirmed.

On the evening of May 5, the extensive addition to the Invincible Works at Silver Creek, N. Y., was completed and thrown open to the public. It is estimated that more than four hundred availed themselves of the company's invitation, to visit the new factory. The capacity of the place has been nearly doubled by the annex 100 feet long, 40 feet wide and three stories high, making one of the most capacious and convenient shops in the town. The hall arranged for dancing, easily accommodated the large company, and was brilliantly illuminated by arc lights. The decorations were especially artistic. Everywhere shone the stars and stripes. Large portraits of Washington, Lincoln, Grant, and other heroes whom Americans delight to honor, were placed conspicuously upon the walls, and the raised orchestra space was also draped with large

flags. A number of guests from adjoining towns were present and the occasion was much enjoyed. The dancing was continued until the "wee sma" hours, and with the excellent music and perfect floor, there seemed nothing which could add to their pleasure. The many friends of the Invincibles offered congratulations on the surprising prosperity of the company so lately organized, and showered upon them good wishes for their future success, which are in a fair way to be brilliantly realized.

Grain Dealers' Associations.

THE GRAIN, HAY AND FEED RECEIVERS' ASSOCIATION OF CINCINNATI.

President, Chas. S. Maguire; secretary, Peter Van Leunen; treasurer, James A. Loudon.

THE GRAIN RECEIVERS' AND SHIPPERS' ASSOCIATION OF CHICAGO.

President, John Hill Jr.; vice-president, S. H. Greeley; secretary, W. N. Eckhardt; treasurer, Wm. Nash.

CAR GRAIN ASSOCIATION OF BUFFALO.

President, Charles Kennedy; vice-president, J. H. Rodebaugh; treasurer, W. V. Downer; secretary, S. W. Yantis.

THE GRAIN RECEIVERS' ASSOCIATION OF MINNEAPOLIS.

President, A. M. Woodward; vice-president, W. G. Nicholls; secretary, Wm. B. Mohler; treasurer, H. W. Commons.

SOUTHERN ILLINOIS GRAIN BUYERS' ASSOCIATION.

President, W. D. Sparks, Alton; vice-president, J. E. Duffield, Jerseyville; treasurer, W. B. Pierce, Alton; secretary, G. E. Brown, Brighton.

ILLINOIS GRAIN DEALERS' ASSOCIATION.

President, John Crocker, Maroa; vice-president, E. R. Ulrich, Jr., Springfield; treasurer, F. M. Pratt, Decatur; secretary, B. S. Tyler, Decatur.

CENTRAL IOWA GRAIN DEALERS' ASSOCIATION.

President, Allen Smith, Boone; vice-president, B. A. Lockwood, Des Moines; treasurer, M. McFarlin, Des Moines; secretary, M. T. Russell, Des Moines.

GRAIN SHIPPERS' ASSOCIATION OF NORTH-WESTERN IOWA.

President, T. M. C. Logan, Onawa; vice-president, E. M. Parsons, Carroll; secretary and treasurer, F. D. Babcock, Ida Grove; assistant secretary, F. G. Butler, Schaller.

OHIO GRAIN DEALERS' ASSOCIATION.

President, Daniel McAllister, Columbus; vice-president, J. B. Van Wagener, London; treasurer, Jesse Brundige, Kingston; secretary, Huntington Fitch, Columbus.

GRAIN DEALERS' ASSOCIATION OF SOUTH-WESTERN IOWA AND NORTHWEST-ERN MISSOURI.

President, R. R. Palmer, Creston, Iowa; vice-president, E. H. Vanschoiach, Griswold, Iowa; treasurer, J. B. Samuels, Riverton, Iowa; secretary, G. A. Stibbens, Coburg, Iowa.

Davis' Grain Tables, a book which no grain dealer should be without, will be sent with the "American Elevator and Grain Trade" one year for \$1.50.

Eight years ago Samuel R. Reynolds, grain buyer of Des Moines, Iowa, secreted \$3,500 in a hole in a wall of his cellar instead of depositing it in a bank. Last month for the first time Mr. Reynolds decided to see if the money was still there. It was gone.

Three boys ranging in age from 17 to 19 years were recently arrested at Peoria, Ill., while stealing grain from cars in the C., B & Q. yards. They had broken into two cars of corn and taken about 6 bushels from each car. This is one cause of shortages in shipments.

Some shippers claim that the corn which moved east at the opening of navigation is requiring a great deal of handling to keep it in condition, and that this is one reason why the seaboard is not taking any more cargoes. As this season is a good deal earlier than last, corn, they claim, is really in the germinating period, making the movement of winter shelled corn a little hazardous.

CROP REPORTS

[Readers will confer a favor by sending us reports each month of the acreage and condition of growing crops, the amount of grain and hay in farmers' hands and stocks in store, for publication in this department.]

CALIFORNIA.—The state crop report of California estimates the wheat crop at 1,000,000 tons, against 700,000 tons last year.

NEBRASKA. Sweetwater, Buffalo Co., May 12.—The wheat crop never looked better at this time of the year. P. L. LIVINGSTON.

SOUTH DAKOTA. Forest City, Potter Co., May 1.—We have finer crop prospects at present than we have ever had before. F. H. WELLS.

OKLAHOMA. Ingalls, Payne Co.—There are prospects for a good yield of wheat. We will be receiving the new crop about May 23. INGALLS MILL CO.

OHIO. Octa, Fayette Co., May 11.—Nearly all the wheat in this section has been plowed up. There will not be over one-fifth of a crop. McDONALD & GOURD.

NEBRASKA. Bartley, Redwillow Co., May 11.—The growing crop here is very large, and is in good condition at present. The old grain is all gone. PARRISH & SMITH.

KANSAS. Hollenberg, Washington Co., May 1.—There is a fine outlook for all grains. We have had good, heavy rains, which improved the conditions. SYLVESTER BROWER.

WISCONSIN. Alma, Buffalo Co., May 11.—The acreage of winter wheat in this county is large, of spring wheat average. The condition was never better, and there are prospects for a large crop. ALMA MILLING CO.

SOUTH DAKOTA. Spencer, McCook Co., May 7.—The seeding of small grain is about finished, and corn planting is the order of the day. We have had good soaking rains, and everything is in fine condition, and farmers are happy. P. L. BROWN.

ILLINOIS. Steeleville, Randolph Co., May 11.—Wheat in this part of the country is looking well. The farmers say they will have a much larger crop than last year. There are some complaints of chinch bugs. A little rain would help wheat along. W. J. VOGEL.

MICHIGAN. Bellevue, Eaton Co., May 13.—The acreage of wheat is about the same as last year with prospects of an average of about 80 per cent. of a full crop. The stocks of grain in store and in farmers' hands are very small, amounting to only a few thousand bushels. J. R. HALL.

CLOVER in Ohio May 1.—Zahm reports that old clover turns out very poorly, being affected by the drouth last year, and badly frozen out since. The answers regarding clover are as follows: Forty-two say condition is good, 40 say condition is fair, 84 say condition is poor, 127 say condition is very poor.

TENNESSEE. Clarksville, Montgomery Co., May 11.—The acreage of wheat in this section is about an average. Up to a couple of weeks ago prospects were very flattering for a good crop. At present reports of the condition are very conflicting and unreliable. In some sections army worms have damaged the wheat. The crop needs rain, and unless we have some very soon it will suffer. F. P. GRACEY.

INDIANA. Argos, Marshall Co., May 11.—The condition of growing wheat is generally favorable. Growth is advancing rapidly under warmth and moisture. There are prospects for an early harvest. There is a very small amount of old wheat in farmers' hands. We have about a full acreage. Corn planting has been pushed vigorously, and is well advanced. Oats are looking well. Meadows and pastures are making rapid growth. J. C. GORDON.

INDIANA. Bloomington, Parke Co., May 12.—The season here is very forward, and most of the corn is planted and up. Wheat generally is looking very good. We have had good rains when we needed them. During the past two weeks I have traveled over considerable of the state of Indiana, and with the exception of wheat sown very late and that sown on clay soil, which was badly winter-killed, the crop looks well. With favorable weather from now on there will be about an average crop. T. M. WARNE.

NORTH DAKOTA. Monango, Dickey Co., May 11.—The seeding has been very backward here owing to wet land, but now all farm work is progressing rapidly, all seeded grain springing up fast; the growth is rapid, for which the condition of the soil is fine. The acreage of wheat will be about an average, though some will go in late, and maturity will be doubtful. The stocks of grain in hands of farmers are very small, practically none in this vicinity, certainly none but what the local mills will consume. There will be considerable flax sown

this year in the northern and eastern part of North Dakota. The weather at this time is all that could be desired for the growing plant. W. A. CALDWELL.

IOWA. Adair, Adair Co., May 12.—There is about the same acreage of corn as last year, a decrease in oats acreage and an increase in that of wheat. The prospects for corn are good, but the hot winds have damaged the oats crop somewhat. There is about 20 per cent. of old corn, and 15 per cent. of oats in farmers' hands. R. K. EBY.

SOUTH DAKOTA. Aberdeen, Brown Co., May 13.—The acreage of wheat in this part of the state will be about the same as last season, but a large percentage of it has been put in wheat in very poor condition—stubbed in—and cannot bring a good crop with the most favorable weather from now on. Seeding to wheat is about finished. There is very little wheat in store in the country elevators at present, and we estimate that not over 10 per cent. of the old crop is still in farmers' hands. OWENS & PERRY.

ILLINOIS. Metropolis, Massac Co., May 11.—The acreage of wheat will not vary materially from that of last year. The condition was quite promising until about two weeks ago, since which time the weather has been very dry, and this, together with chinch bugs, Hessian flies and army worms, has done some injury. We have it from reliable farmers that the crop is damaged from 30 to 50 per cent., even with favorable conditions henceforward. We had a little rain last night, but not enough to do much good. Old stocks are light. The largest mill has been idle half the time since January 1. STEWART BROS.

KENTUCKY.—The State Commissioner of Agriculture has sent out the following bulletin based on letters from correspondents representing 103 counties: There is a general report of improvement in the condition of wheat during April. The forcing weather which prevailed during the entire month has brought the crop from what was an extremely backward condition to something very nearly approaching a normal condition of growth for the season. There is still quite a deficiency in the thickness of the plant on the ground, the dry weather having been unfavorable to branching. From three counties complaints are received of damage being done the crop by chinch bugs. The average condition is given at 74, being an improvement of 5 points for the month. On acreage the average is 87.

TEXAS. Allen, Collin Co., May 12.—The acreage of oats is about the same as last season, with about 25 per cent. of it Volunteer oats. It is looking well, but needs rain badly. Spring oats are looking well. The acreage of wheat is about the same as last year. The yield will be poor on account of rust. The acreage of corn is 20 per cent. less than last year. It was planted late, the ground is in poor condition, and the prospects are only tolerably good. The cotton acreage is 20 per cent. more than last year; prospects are good so far. All crops have been needing rain for the past 10 days, and without rain in the next 10 days wheat and oats will be cut considerably short. About 20 per cent. of the corn crop is still in farmers' hands, and fully 25 per cent. of the oats crop is stored and in farmers' hands yet. W. C. KILLINGSWORTH & CO.

MICHIGAN. Lansing, May 8.—April weather, according to the Michigan crop report, was very favorable and crops of all kinds made good progress. Not more than 2 or 3 per cent. of the wheat sowed will be plowed up, because winter killed or otherwise destroyed. With few exceptions these reports show no damage by insects. The average condition of wheat in the southern and central counties of the state is the highest reported in five years. The figures are: Southern counties, 91; central and northern counties, 91, and state, 92. In 1894 the figures were 89 in the southern and central counties, 95 in the northern, and the average yield per acre was 16.86 bushels. In the state an average of 26 per cent. of the meadows will be plowed up. Owing to the drouth the seeding of last year was very generally lost, and there are very few clover meadows in the state. Timothy meadows are making fine growth. The average condition of meadows is 81 in the southern counties, 91 in the central, 95 in the northern, and 85 for the state.

WHEAT in Ohio May 1.—We have received reports from 341 reliable parties in Ohio regarding the wheat crop. These reports show that this state will produce this year about half an average crop, and will produce this amount only with the most favorable weather from now on, because so much of the acreage has been plowed up. In answer to question, What size crop will be produced? Twenty-four say there will be an average crop; 8 say there will be less than an average crop; 44 say there will be three-quarters of a crop; 41 say there will be two-thirds of a crop; 139 say there will be half a crop; 45 say there will be one-third of a crop; 38 say there will be one-quarter of a crop; 2 say there will be one-eighth of a crop. In answer to question, How much has been plowed up? Five say less than 5 per cent. of amount sown; 49 say 5 per cent. of amount sown; 77 say 10 per cent. of amount

sown; 9 say 15 per cent. of amount sown; 27 say 20 per cent. of amount sown; 48 say 25 per cent. of amount sown; 24 say 30 per cent. of amount sown; 25 say 50 per cent. of amount sown; 2 say 75 per cent. of amount sown; 72 say none has been plowed up. Among the latter, however, a great many say some will be plowed up in the near future. J. F. ZAHM & CO.

NORTH DAKOTA. Grand Forks, Grand Forks Co., May 4.—A correspondent writes: This portion of the Red River valley is afflicted with a superabundance of rain, and the ground is soaked. In the West and Southwestern part of the state considerable seeding has been done, and in some localities is nearly finished. While the eastern portion has had too much rain, it is expected that this section of the Valley will raise a large crop of good hard wheat. But should the rains continue much of the seeding will have to be done on the stubble. There is still a large quantity of wheat in farmers' hands which has been carried over from last season's crop.

OHIO. Columbus, May 8.—Though the weather has been all that could be desired, the condition of the growing wheat in Ohio has not improved since the first of April, when the crop bulletin showed it to be only 57 per cent. of an average condition at that season. The bulletin for May places the condition per cent. at only 55. Secretary Miller says the plant must have been more thoroughly winter killed than was supposed. The yield cannot be far in excess of an average in the whole state, for the plowing up of many fields has greatly reduced the acreage. The following are the principal points of the bulletin:

Wheat—Condition, 55 per cent.; barley, 60 per cent.; rye, 68 per cent.; oats, area compared with last year, 103 per cent. Condition compared with an average, 92 per cent. Wheat—Amount drilled in, 93 per cent.; condition of drill, 57 per cent.; amount sown broadcast, 7 per cent.; condition of broadcast, 46 per cent.; damage by Hessian fly, 2 per cent.; by other insects, 1 per cent. Clover—Average date of seeding, March 20; area compared with last year, 90 per cent.

GOVERNMENT CROP REPORT.—The May returns of the statistical division of the Department of Agriculture on the condition of winter wheat show an increase of 5.6 points above the April average, being 82.7, against 77.1 last month, and 82.9 in May, 1895. The report says: The averages in nine principal winter wheat states are: Pennsylvania, 64; Ohio, 55; Michigan, 90; Indiana, 85; Kentucky, 77; Illinois, 90; Missouri, 81; Kansas, 96; California, 100. The returns of the correspondents of the division of statistics show that, excepting a few states, there has been general improvement in the condition of winter wheat throughout the country, and the reports collected through the climate and crop services of the weather bureau, covering the week embracing the last three days of April and the first four days of May, compared with the reports of the previous week, indicate a general improvement in the condition of winter wheat in the principal wheat states, but show that in Maryland, New York, Pennsylvania and Oklahoma the condition of winter wheat was not so promising. Special reports to the department show crop prospects excellent in Great Britain and France, good in Russia and Austria-Hungary, fair in Germany, Italy and Roumania, and unfavorable only in Spain. The condition of winter rye on May 1 was 87.7 per cent.; of barley, 89.2; spring pasture, 93.2; meadows, 91.8. The proportion of spring plowing accomplished by May 1 this season was rather above the average, being 79.6 per cent., or 1.9 points above that of an average year.

ILLINOIS. Springfield, May 9.—The State Board of Agriculture makes public the following extracts from its May crop report: The reports received under date of May 1 give the condition of the growing wheat in Northern Illinois as 96 per cent. of a seasonable average, that in Central Illinois as 90 per cent., and in the southern division of the state as 83 per cent. of an average. The wheat, as a whole, has come out much better since the spring rains and warm weather than it promised early in the season. About 5 per cent. of the area seeded last fall was winter-killed or promises so little that it will be plowed up for corn, leaving 1,591,000 acres for harvest. Old chinch bugs are reported in vast numbers in many sections of the state, and it is feared great damage will be done to the wheat by the young bugs, but there are not enough of them yet to injure it. No damage from Hessian fly has been reported. Of the 1895 wheat crop of 18,093,000 bushels about 10 per cent., or 1,813,000 bushels were in producers' hands on May 1. The spring wheat area in Northern Illinois is 7 per cent. less than in 1895, and the condition of the crop in this section is a full average for this date. About 2 per cent. of the rye seeded last fall was winter-killed, leaving 121,000 acres for harvest. In the northern division of the state the condition May 1 was 99 per cent. of an average. Rye is heading out in several counties. The area devoted to oats this season will be about 2 per cent. less than in 1895 in

the northern division. In Northern Illinois the condition is three points above the average. The amount of old corn in first hands May 1, 104,808,000 bushels, is the largest ever reported, and is twice as much as reported May 1 last year.

TENNESSEE, Dyersburg, Gibson Co., May 12.—The wheat has been considerably damaged by army worms in an area of 40 miles in this territory, and I notice that they are doing some damage south of us in North Mississippi and Alabama. The pest has entirely destroyed meadows in this section, and for the most part farmers have replanted them in corn. There is some complaint of cutworms in the corn, but the damage is small. The acreage in corn is not as large as last year. The farmers of this section are diversifying their crops more than ever before; on an average they have increased the acreage in cotton about 50 per cent. this year. The crops that have not been molested were never finer; however, they are three to four weeks later than usual, on account of heavy rains in April. There are some crops of wheat and meadows in this section which the worms have not touched, and I think they are good for a full crop if nothing happens to them. Oats are in fair condition. There is still a good deal of corn in the hands of farmers here. There is not much disposition to sell except with those who have to do so, and they have sold about all they can with enough reserved for their own use. Others are feeding their corn to hogs and cattle. J. L. HARRELL.

KANSAS, Topeka, May 5, 1896.—A summarized report of the State Board of Agriculture on crop conditions existing April 30, based on an analysis of answers from inquiries in detail sent to 1,000 correspondents and covering practically every neighborhood in the state, is as follows: **WINTER WHEAT.**—Well-nigh every one of the 105 counties reports winter wheat now in most excellent condition, described in many as "best prospect we have ever had," "could not be beaten," "promises a heavy crop," etc. The percentage of condition in different counties ranges in average from 72 in Cherokee to 117 per cent. in Gove, and for the entire state is 97 per cent. But two or three reporters make allusion to presence of chinch bugs (these being on the wing) and none mention their doing or even threatening harm, except in perhaps one township, the rains and considerable cool weather so far having been altogether unfavorable to their propagation. The ground is full of moisture, the ideal wheat conditions prevail and everywhere the growth is unusually forward and rank. The acreage estimated by correspondents as seeded last fall compared with that sown the previous year, shows a decrease of 14.11 per cent. The area of the present seeding estimated as destroyed by winter and other causes amounts to 4.66 per cent., leaving a net area of 3,321,500 acres, much of it now well advanced toward heading out. This with five exceptions is the largest in the state's history and but about 13 per cent. less than the seeding for its great crop of 70,000,000 bushels in 1892. It should be understood that the figures made at this time as to acreage of wheat or other crops are the conservative estimates of intelligent farmers and business men in their several localities, averaged for each county, and the resulting percentage applied to its previous year's seeding, but that those derived later on from returns of enumeration by assessors are the ones accepted as the final and "official" figures, and upon which reports of yields are based. **SPRING WHEAT.**—The area estimated sown is 144,300 acres, being an increase of 25 per cent. or 28,800 acres, the increase being chiefly found in Cheyenne, Sherman, Norton and Decatur counties, in the order named. Its condition averages 102. **RYE.**—The area in rye is reported as 153,000 acres, which is a decrease of 27,000 acres, or 15 per cent. from last year. With few exceptions the condition is rated at 100 or above, and for the entire state averages 98.5. **OATS.**—Oats indicate an increase of 60,200 acres or 3.76 per cent. Condition 97 per cent. **CORN.**—Reports on corn conditions in all sections are invariably favorable—were probably never more so, and the season is from ten days to two weeks advanced. Abundant rains have fallen in April on every part of the state, making the soil generally easy to work and favoring prompt germination. In a few of the southeastern counties plowing and planting have been somewhat retarded by too much rain. Cultivation will begin early and be vigorously carried on, as the mild winter and abundance of feed have left work animals in unusually good strength. The estimates of area planted or to be planted aggregate 8,680,000 acres, an increase of 3.4 per cent. or 285,000 acres over the planting in 1895 and 27.26 per cent. larger than that of the 273,000,000-bushel year, 1889. **THE SORGHUMS.**—The reports indicate a marked advance in popularity and acreage of the sorghums for forage and grain, not only in the western counties, where corn is not largely grown, but in many of the eastern counties as well, where corn grows in greatest abundance. The probable increase in area to be planted is put at not less than 25 per cent. Of these various sorghums Kaffir corn is most frequently given favorable mention.

PRESS COMMENT

SECURE CARRYING CHARGES.

The elevator men succeeded beautifully in their endeavors to secure good carrying charges, advancing them on all grains yesterday to a point that pays them handsomely. They gave out that deliveries would be large unless carrying charges widened. This was undoubtedly done for effect. It scared long holders and made it an easy job to increase carrying charges, and the trade, it is almost needless to say, will have to foot the bill. So long as the trade so gracefully submits to this kind of manipulation we don't know as it is anybody's business, especially as the remedy is in their own hands. It is a system of extortion that is not helping trade, however. None know this better than the men who permit it to continue year in and year out. —Chicago Chronicle.

A GREEN GOGGLED VIEW.

The defeat of St. John's public warehouse bill will entail an annual loss of at least \$25,000,000 upon the farmers of Iowa until the greater wisdom of a future general assembly has enacted a similar measure to provide for the retention of toll-gate elevator and board of trade profits on Iowa grain. All the elevator owners and grain buyers of other states are opposed to Iowa gaining the great and helpful benefits certain to result from a properly guarded public warehouse law, and practically all of those interests within the state are opposed to such a law. The local elevator owners and grain buyers want to continue their present plan of purchasing and selling, by which Iowa farmers have lost at least an average of 25 per cent. of the value of their grain ever since it began to move toward the elevators and boards of trade of the world. —Iowa State Register.

OUT RATES AND SHIPPERS' CONSCIENCE.

It is amusing to note how much more tender is the conscience of shippers since the announcement of the decision of the United States Supreme Court in the Brown case than it was before that time. Three months ago the man who would refuse to accept a reduced rate in almost any form was a rare avis, a sort of a mild lunatic who had permitted his scruples to run away with his common sense. A few instances of such refusals are known to have occurred, even in the city of Chicago, and one house in particular had for some time refused to be a party to such a procedure, but the recital of the fact was commonly received with an incredulous smile as though nobody was expected to believe it. Now, however, the situation has entirely changed, and one of the first questions asked by many shippers concerning rates quoted them by railroad representatives is as to their lawfulness. —Railway Review.

THE BURDEN OF NEW YORK'S GRAIN TRADE.

No exporter outside of New York, no matter how large his business, nor the length of time he has been engaged in it, can tell to-day what the f. o. b. charge at that port is. It is anywhere from a premium for loading the stuff to 1¼ cents per bushel. But just where it may happen to be remains always for those who control the elevator facilities to determine—not the merchant who is endeavoring to do business. Under such conditions it is to be wondered at that trade is seeking other outlets where elevator combines cannot dictate whether you may or may not trade, because in these times it is the fraction of a cent that influences and determines the course of trade, much less 1¼ cents? So that the cure for many of New York's woes lies with herself, and a recognition of this by the managers of the Produce Exchange will be much more honest and effective than blatant invective against so just and fair an arrangement as Baltimore's differential. —New York Journal of Commerce.

THE METRIC SYSTEM.

Fairly considered, there is little that can be said in defense of our popular methods of weight and measure, except that we are accustomed to them. In our coinage system we recognize the merits of the decimal system, and at the time this was put in force there is reason to believe if the metric system had existed, that also would have been adopted as a part of our national regulation. In many scientific works published by Americans the metric system is adopted as a basis for calculation, because of its greater value for purposes of this kind. It is not like long measure, dry measure, wet measure, etc., the outgrowth of a semi-barbarous condition of existence, but is, on the contrary, the results of scientific study applied to matters of this kind; and hence, is for the purposes intended as superior to the systems we have in use as the locomotive is to the stage coach or the telephone to the speaking trumpet. If we adopt it the English will probably follow suit,

because in the event of action on our part England will be about the only civilized nation in the world adhering to old customs. —Boston Herald.

SPECULATORS' BABY ACT.

Pleading the "baby act" by claiming that speculative transactions are gambling ones is being badly sat down on by the law courts. This is nothing especially new. We call attention to it merely for the purpose of suggesting that it is not only a very weak proceeding on the part of any man, but generally a dishonorable act. A speculator is not a thoroughbred unless he can take losses calmly, as well as profits. If he cannot afford to lose as well as win he should let speculation severely alone. This is business. —Chicago Times-Herald.

Items from Abroad

A report from Spain dated May 1 states that the cabinet is considering the advisability of abolishing the duties on foreign grain imported, on account of the serious drouth which has almost destroyed the cereal crops.

On May 1 the German Reichstag, by a vote of 200 to 39, adopted a motion to prohibit option trading in grain and grain products on the Boerse, and the Prussian ministry is reported to advocate its acceptance by the Federal Council.

Holland imported in March 424,000 quarters (of 480 pounds each) of wheat, and 126,000 sacks flour, and exported 291,000 quarters wheat and 9,000 sacks flour. The net import of the two articles in the eight months ending March was 1,530,000 quarters, against 1,320,000 in the corresponding eight months last season.

Shipments from Russian and Black Sea ports from Aug. 1, 1895, to April 24, compared with those of the preceding season, included: Wheat, 16,584,000, against 13,913,000 quarters (of 480 pounds each); corn, 959,000, against 2,391,000 quarters (of 480 pounds each); barley, 7,409,000, against 9,799,000 quarters (of 400 pounds each).

Argentine exports during the 16 weeks from January 9 to April 23, included, in 1896, 1,475,500 quarters; in 1895, 2,600,000 quarters; in 1894, 2,954,000 quarters of wheat. Exports of corn during the same time amounted to 1,504,000 quarters, against none up to the same time in 1895, total exports of corn in 1895 being 3,659,500 quarters. Exports of corn in 1894 were practically nil.

According to advance sheets of the Year Book of Australia, the wheat crop of that country for the season of 1894-95, amounted to 27,856,065 bushels, from 3,700,559 acres; against 37,142,500 bushels, from 3,922,857 acres, for the season of 1893-94. In 1894-95 there were 338,195 acres, 7,347,200 bushels, of oats; 317,708 acres, 8,605,769 bushels, of corn; 60,017 acres, 1,120,728 bushels, of other cereals, exclusive of barley.

In writing of the so-called state granaries of Roumania, a correspondent in Braila writes to an English publication: "There are no state granaries in Roumania. There are in the docks at Galatz and Braila certain granaries and silos, constructed for and supposed to be suited to the requirements of these river ports; they have, however, never fulfilled the purposes for which they were built, and nothing more than general dissatisfaction has emanated from those who have stored grain in them, even during the few months when the extreme cold of a Roumanian winter would allow grain to be equally well stored in the open air. The reason why these silos command patronage is because the arrangements, for receiving grain by rail and discharging same by elevator, together with the financial facilities offered, provide more or less impecunious Danubian merchants with opportunities cheaper than they could otherwise obtain."

BOOK NOTICES.

STATISTICAL ANNUAL FOR 1896.—The Cincinnati Price Current's Statistical Annual for 1896 consists of statistical matter covering the grain trade, provisions, crops, etc., for the year ending March 1, 1896, and comparisons with former years. A good index adds to the value of the book. It is compiled by Chas. B. Murray, and is issued as a supplement to the Cincinnati Price Current.

The good people of Canton, N. D., built a jail three years ago, but it has had only one occupant since then. But most of the time it serves the useful purpose of a granary for F. Gillice, a local dealer.

In the absence of a special contract the liability of a common carrier accepting freight for a place beyond its usual route ceases when such freight is properly delivered to a competent carrier carrying to the place of address or connected with those who thus carry.

RECEIPTS AND SHIPMENTS AT TOLEDO.

The receipts and shipments of grain and hay at Toledo, Ohio, during the month of April, as compared with the same period of the preceding year, were, according to Denison B. Smith, secretary of the Produce Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	386,700	270,300	162,000	1,153,000
Corn, bushels.....	179,700	289,900	622,100	573,000
Oats, bushels.....	6,100	31,200	11,800	8,100
Barley, bushels.....		13,800		
Rye, bushels.....	3,100	3,300	2,900	11,800
Clover Seed, bags.....	4,962	5,635	18,662	14,707
Flour, barrels.....	5,007	4,954	45,378	88,359

RECEIPTS AND SHIPMENTS AT CINCINNATI.

The receipts and shipments of grain and hay at Cincinnati, Ohio, during the month of April, as compared with the same period of the preceding year, were, according to C. B. Murray, superintendent of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	51,208	104,093	30,000	67,754
Corn, bushels.....	277,264	320,470	37,292	62,288
Oats, bushels.....	285,528	311,880	124,243	107,479
Barley, bushels.....	95,730	24,500	185	72
Rye, bushels.....	20,842	56,380	4,597	28,193
Clover Seed, bags.....	2,971	4,240	3,224	4,705
Timothy Seed, bags.....	2,891	2,611	3,276	3,352
Other grass seeds, bags.....	9,757	1,604	8,201	5,205
Hay, tons.....	5,756	8,886	1,777	6,579
Flour, barrels.....	103,609	206,268	72,609	171,474
Malt, bushels.....	61,271	89,345	53,437	51,394

RECEIPTS AND SHIPMENTS AT BUFFALO.

The receipts and shipments of grain and hay at Buffalo, N. Y., during the month of April, as compared with the same period of the preceding year, were, according to Wm. Thurstone, secretary of the Merchants' Exchange, as follows:

Articles.	Receipts by Lake.		Shipments by Canal.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	1,705,334	1,825,082		
Corn, bushels.....	5,715,297	1,060,312		
Oats, bushels.....	2,087,262	809,700		
Barley, bushels.....	202,500	140,000		
Rye, bushels.....	45,000			
Grass seed, bags.....	251			
Flaxseed, bushels.....	172,850			
Flour, barrels.....	279,115	33,015		
			Canal opened May 1.	Canal opened May 1.

RECEIPTS AND SHIPMENTS AT PEORIA.

The receipts and shipments of grain and hay at Peoria, Ill., during the month of April, as compared with the same period of the preceding year, were, according to R. C. Grier, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	110,400	40,200	78,600	50,400
Corn, bushels.....	1,552,050	875,500	406,750	124,150
Oats, bushels.....	1,015,500	1,023,000	972,650	1,128,600
Barley, bushels.....	137,200	37,500	87,500	69,300
Rye, bushels.....	11,450	3,600	3,600	1,200
Mill Feed, tons.....	1,242	795	8,275	5,784
Seeds, pounds.....	60,000	71,000		120,000
Broom Corn, pounds.....	105,000	75,000	54,700	60,000
Hay, tons.....	3,510	2,097	2,133	590
Flour, barrels.....	24,150	1,870	26,700	30,675
Spirits and Liquors, bbls.....	680	2,067	15,969	22,339
Syrup and Glucose, bbls.....	2,000	1,100	46,660	38,160

RECEIPTS AND SHIPMENTS AT MILWAUKEE.

The receipts and shipments of grain and hay at Milwaukee, Wis., during the month of April, as compared with the same period of the preceding year, were, according to Wm. J. Langson, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	615,105	559,530	254,455	44,555
Corn, bushels.....	170,300	92,950	7,150	4,900
Oats, bushels.....	450,000	470,000	979,700	498,794
Barley, bushels.....	299,910	234,690	278,120	93,932
Rye, bushels.....	56,870	58,530	32,200	20,000
Grass Seed, pounds.....	851,560	492,960	510,570	298,235
Flaxseed, bushels.....	13,150	5,070	6,960	
Hay, tons.....	1,287	1,175	547	71
Flour, barrels.....	372,400	111,855	535,835	211,137

RECEIPTS AND SHIPMENTS AT CHICAGO.

The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during April, 1896 and 1895, of seeds, hay and broom corn:

Receipts.	Timothy lbs.	Clover lbs.	Other Grass Seeds, lbs.	Flaxseed, bu.	Broom Corn, lbs.	Hay, tons.
1895.....	3,243,234	984,286	329,350	73,468	168,720	15,065
1896.....	3,847,228	1,179,849	1,538,639	326,109	970,610	24,272
Shipments.....	5,825,506	1,137,826	729,088	32,911	48,993	806
1896.....	8,762,246	732,156	2,907,490	218,187	1,236,941	15,206

RECEIPTS AND SHIPMENTS AT MINNEAPOLIS.

The receipts and shipments of grain and hay at Minneapolis, Minn., during the month of April, as compared with the same period of the preceding year, were, according to G. D. Rogers, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	3,782,500	2,322,500	617,000	519,860
Corn, bushels.....	94,140	48,410	49,150	2,410
Oats, bushels.....	384,500	184,460	352,280	100,930
Barley, bushels.....	32,490	9,240	71,820	7,180
Rye, bushels.....	11,740	11,560	14,190	34,750
Flaxseed, bushels.....	95,220	6,090	122,880	9,600
Hay, tons.....	1,241	1,810	30	29
Flour, barrels.....	15,758	18,596	97,829	761,756

RECEIPTS AND SHIPMENTS AT DETROIT.

The receipts and shipments of grain and hay at Detroit, Mich., during the month of April, as compared with the same period of the preceding year, were, according to F. W. Waring, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	58,694	87,263	17,526	859,775
Corn, bushels.....	87,795	106,689	46,263	13,628
Oats, bushels.....	85,256	142,528	4,195	7,431
Barley, bushels.....	43,000	43,618		
Rye, bushels.....	1,749	1,629	1,120	
Hay, tons.....				
Flour, barrels.....	6,317	13,159	4,800	14,580

RECEIPTS AND SHIPMENTS AT DULUTH.

The receipts and shipments of grain and hay at Duluth, Minn., during the month of April, as compared with the same period of the preceding year, were, according to Frank E. Wyman, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	2,503,500	1,759,689	2,493,263	147,864
Corn, bushels.....	6,018		1,241	567
Oats, bushels.....	117,288	62,068	908,538	25,924
Barley, bushels.....	286,818	4,122	102,610	
Rye, bushels.....	31,666	15,386	556	
Grass seed, pounds.....			191,016	
Flaxseed, bushels.....	125,519			3,277
Flour, barrels.....	174,120		283,285	159,551
Flour production Duluth and Superior.....	167,825	244,607		

WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at nine primary markets during the 45 weeks ending May 9, for the last three years, according to the Cincinnati Price Current were as follows:

	1895-96.	1894-95.	1893-94.
St. Louis.....	11,115,000	8,885,000	11,850,000
Toledo.....	6,069,000	14,000,000	11,923,000
Detroit.....	2,199,000	3,777,000	8,141,000
Kansas City.....	7,844,000	6,291,000	12,870,000
Cincinnati.....	928,000	1,044,000	998,000
Winter.....	28,155,000	33,997,000	45,282,000
Chicago.....	21,429,000	22,680,000	20,385,000
Milwaukee.....	9,259,000	6,253,000	10,009,000
Minneapolis.....	70,667,000	47,761,000	30,517,000
Duluth.....	52,887,000	32,960,000	30,133,000
Spring.....	154,562,000	109,654,000	107,044,000
Total, 45 weeks.....	182,717,000	143,651,000	152,326,000

John Rathler, grain inspector, has brought suit against the Northern Pacific Railroad for \$10,000 for injuries received at Staples, Minn.

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, May 6, 1896, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, Bu.	Oats, bu.	Rye, bu.	Barley, Bu.
Albany.....		60,000	80,000		
Baltimore.....	315,000	823,000	121,000	32,000	
Boston.....	91,000	242,000	17,000		20,000
Buffalo.....	1,252,000	507,000	359,000	288,000	215,000
do. afloat.....					
Chicago*.....	15,242,000	5,142,000	2,347,000	398,000	10,000
do. afloat.....					
Cincinnati.....	9,000	2,000	29,000	1,000	30,000
Detroit.....	205,000	22,000	9,000	12,000	1,000
Duluth.....	9,738,000		240,000	195,000	224,000
do. afloat.....					
Indianapolis.....	68,000	18,000			
Kansas City.....	1,102,000	76,000	44,000	29,000	
Milwaukee.....	820,000	2,000	1,000	366,000	34,000
do. afloat.....					
Minneapolis.....	17,907,000	64,000	722,000	82,000	27,000
Montreal.....	681,000	51,000	429,000	6,000	61,000
New York.....	874,000	958,000	1,401,000	9,000	1,000
do. afloat.....					
Oswego.....	94,000				10,000
Peoria.....	15,000	3,000			
Philadelphia.....	103,000	88,000	108,000		
St. Louis.....	878,000	308,000	104,000	1,000	
do. afloat.....	40,000	94,000	26,000		
Toledo.....	573,000	91,000	51,000	127,000	
do. afloat.....					
Toronto.....	30,000	21,000	104,000		48,000
On Canals.....	768,000	249,000	715,000	58,000	113,000
On Lakes.....	3,189,000	1,088,000	708,000		318,000
On Miss. River.....	93,000	337,000	48,000		
Total.....	54,000,000	10,337,000	7,852,000	1,555,000	1,112,000
Corresponding date 1895.....	59,623,000	7,981,000	6,155,000	145,000	240,000

* Including grain in National Elevator, which is not regular under the rules of the Chicago Board of Trade.

DESTINATION OF AMERICAN WHEAT EXPORTS.

The last report of the Bureau of Statistics shows the destination of the wheat exported from the United States to be as follows:

Countries.	Month ending Mar. 31.		Nine months ending Mar. 31.	
	1896.	1895.	1896.	1895.
United Kingdom.....	2,653,058	4,870,445	35,767,153	43,568,615
Germany.....	24,592	42,874	617,419	2,062,438
France.....		466,187	114,099	1,443,786
Other Europe.....	444,163	1,020,815	5,871,153	9,636,789
British North America.....	6,038	9,234	2,130,774	2,489,173
Mexico.....		514	1,185	7,919
Central American States and British Honduras.....		6,250	6,831	39,453
West Indies and Bermuda.....		44	2,058	11,736
Brazil.....				31
Other South America.....		270	660	3,969
Asia and Oceania.....	115,925	2,260	1,336,849	30,055
Africa.....	240,573	4,095	1,312,957	21,467
Other countries.....				52
Total bushels.....	3,490,913	6,425,973	47,206,773	59,368,107

DESTINATION OF AMERICAN CORN EXPORTS.

The last report of the Bureau of Statistics shows the destination of the corn exported from this country to be as follows:

Countries.	Month ending Mar. 31.		Nine months ending Mar. 31.	
	1896.	1895.	1896.	1895.
United Kingdom.....	4,015,926	2,078,817	41,410,308	9,452,064
Germany.....	1,106,035	437,912	10,015,330	1,667,893
France.....	393,872	152,000	3,370,283	401,101
Other Europe.....	3,347,411	464,473	17,161,449	2,435,602
British North America.....	273,335	166,763	3,403,537	1,067,618
Mexico.....	227,426	21,858	940,019	165,277
Central American States and British Honduras.....	15,237	5,997	52,349	107,549
Cuba.....	1,632	23	169,934	312,713
Puerto Rico.....			100	1,200
Santo Domingo.....	807	72	1,645	3,378
Other West Indies and Bermuda.....				
South America.....	35,099	59,362	512,269	487,505
Asia and Oceania.....	2,590	1,796	101,412	90,218
Africa.....	224	941	34,556	8,929

SEED EXPORTS AND IMPORTS.

Seeds valued at \$212,392 were exported in March, against an amount valued at \$286,171 exported in March, 1895; and during the nine months ending March seeds valued at \$1,277,381 were exported, against an amount valued at \$2,615,299, exported in the corresponding nine months of 1894-95.

Clover seed aggregating 1,020,790 pounds, valued at \$78,624, was exported in March, against 2,455,351 pounds, valued at \$227,215, in March, 1895; and during the nine months ending March 4,743,594 pounds, valued at \$374,651, were exported, against 21,644,194 pounds, valued at \$2,006,380, exported in the corresponding nine months of 1894-95. Cotton seed aggregating 2,765,599 pounds, valued at \$19,609, was exported in March, against 803,445 pounds, valued at \$5,550, in March, 1895; and in the nine months ending March 18,537,522 pounds, valued at \$117,997, were exported, against 9,174,423 pounds, valued at \$74,131, exported in the corresponding nine months of 1894-95.

There was no flaxseed exported in March, and 2 bushels, valued at \$4, were exported in March, 1895; and during the nine months ending March 28,966 bushels, valued at \$31,509, were exported, against 1,197 bushels, valued at \$1,400, exported in the corresponding nine months of 1894-95.

There were 2,102,032 pounds of timothy seed, valued at \$89,640, exported in March, against 631,227 pounds, valued at \$55,350, exported in March, 1895; and in the nine months ending March 9,235,595 pounds, valued at \$411,611, were exported, against 3,746,002 pounds, valued at \$210,932, exported in the corresponding nine months of 1894-95.

Other seeds imported in March were valued at \$24,519, against \$18,052 in March, 1895; and for the nine months ending March exports were valued at \$341,613, against \$322,456 for the corresponding nine months of 1894-95.

Flaxseed imported in March amounted to 9,319 bushels, valued at \$11,673, against 564,121 bushels, valued at \$504,034, imported in March, 1895; and 708,924 bushels, valued at \$764,633, were imported in the nine months ending March, against 2,984,720 bushels, valued at \$3,456,707, imported in the corresponding nine months of 1894-95.

Other seeds, imported free of duty, were valued at \$138,559, for March, against \$60,663, for March, 1895; and the importations for the nine months ending March were valued at \$986,466, against a valuation of \$155,794, for the corresponding nine months of 1894-95. Other seeds, imported under duty, were valued at \$22,245 for March, against \$42,323 for March, 1895; and importations during the nine months ending March were valued at \$536,793, against a valuation of \$608,058 for the corresponding nine months of 1894-95.

IMPORTS AND EXPORTS OF FOREIGN BREADSTUFFS.

The total value of breadstuffs imported in March, according to the last report of the Bureau of Statistics, was \$97,298, against a valuation of \$185,830 for March, 1895; and the valuation of breadstuffs imported in the nine months ending March was \$2,122,497, against \$2,332,686 during the same period of 1894-95.

Barley aggregating 29,017 bushels was imported in March, against 171,931 bushels imported in March, 1895; and during the nine months ending March 709,154 bushels were imported, against 1,979,548 bushels imported in the same period of 1894-95.

Corn amounting to 316 bushels was imported in March, against 976 bushels imported in March, 1895; and during the nine months ending March 3,673 bushels were imported, against 8,494 bushels imported in the corresponding nine months of 1894-95.

Oats amounting to 6,957 bushels were imported in March, against 80,010 bushels in March, 1895; and during the nine months ending March 18,094 bushels were imported, against 304,193 bushels imported in the corresponding nine months of 1894-95.

Wheat aggregating 20,779 bushels was imported in March, against 3,631 bushels in March, 1895; and during the nine months ending March 1,634,959 bushels were imported, against 1,093,168 bushels imported in the same time in the corresponding nine months of 1894-95.

Rye amounting to 25 bushels was imported in March, against 2 bushels in March, 1895; and in the nine months ending March 282,802 bushels were imported, against 12,840 bushels imported in the corresponding nine months of 1894-95.

Of imported breadstuffs an amount valued at \$5,972, was exported in March, against an amount valued at \$26,119, exported in March, 1895; and during the nine months ending March imported breadstuffs valued at \$1,228,480 were exported, against an amount valued at \$98,885 exported in the corresponding nine months of 1894-95.

No imported barley was exported in March, 1896 or 1895; and during the nine months ending March 8,396 bushels were exported, against 3,739 bushels exported in the corresponding nine months of 1894-95.

Of imported oats 4,756 bushels were exported in

March, against none in March, 1895; and during the nine months ending March 7,182 bushels were exported, against none in the corresponding nine months of 1894-95.

Of imported wheat we exported 7,356 bushels in March, against 44,000 bushels in March 1895; and during the nine months ending March 1,858,015 bushels were exported, against 169,817 bushels exported in the corresponding nine months of 1894-95.

RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago since April 15 has been as follows:

April.	NO. 2* R.W. WHT.		NO. 2 SFG WHT.*		NO. 2 CORN.		NO. 2 OATS.		NO. 2 RYE.		NO. 3+ BARLEY		NO. 1+ FLAXSEED	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
15	69 1/2	69 1/2	...	...	30 1/2	30 1/2	19 1/2	19 1/2	...	...	32	34	92	92
16	70	70	...	...	30 1/2	30 1/2	19 1/2	19 1/2	...	...	32	34	92	92
17	70 1/2	70 1/2	...	...	30 1/2	30 1/2	19 1/2	19 1/2	...	...	32	34	91 1/2	92
18	...	...	...	...	30 1/2	30 1/2	19 1/2	19 1/2	...	...	32	34	91 1/2	91 1/2
19	...	...	...	...	29 1/2	30	19 1/2	19 1/2	...	...	32	34	91 1/2	91 1/2
20	...	...	...	...	29 1/2	30 1/2	19 1/2	19 1/2	...	...	32	34	91 1/2	92
21	...	...	...	...	29 1/2	30 1/2	19 1/2	19 1/2	...	...	32	34	91 1/2	92
22	68 1/2	68 1/2	...	...	29 1/2	30 1/2	19 1/2	19 1/2	...	...	32	34	91 1/2	92
23	...	...	...	...	29 1/2	30 1/2	19 1/2	19 1/2	...	...	32	34	91 1/2	92
24	68	68	...	...	29 1/2	30 1/2	19 1/2	19 1/2	...	...	32	34	91 1/2	92
25	68 1/2	68 1/2	...	...	29 1/2	30 1/2	19 1/2	19 1/2	...	...	32	34	91 1/2	92 1/2
26	...	...	...	...	29 1/2	30 1/2	19 1/2	19 1/2	...	...	32	34	91 1/2	92 1/2
27	68 1/2	68 1/2	...	...	29 1/2	30 1/2	19 1/2	19 1/2	...	...	32	34	91 1/2	92 1/2
28	67 1/2	67 1/2	63 1/2	63 1/2	29 1/2	30 1/2	18 1/2	18 1/2	36 1/2	36 1/2	31	35	91 1/4	91 1/4
29	67 1/2	67 1/2	...	...	29 1/2	30 1/2	18 1/2	18 1/2	...	...	31	35	91 1/4	91 1/4
30	...	...	...	...	28 1/2	29	18 1/2	18 1/2	...	...	32	36	91	91
31	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	...	...	63	63	28 1/2	29	18 1/2	18 1/2	35 1/4	35 1/4	30	36	90 1/4	91
2	...	...	...	...	28 1/2	28 1/2	18 1/2	18 1/2	35 1/4	35 1/4	30	36	90 1/4	90 1/4
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	65 1/2	65 1/2	...	...	28 1/2	28 1/2	18 1/2	18 1/2	35 1/4	35 1/4	26	37	89 1/2	90
5	...	...	...	...	28 1/2	28 1/2	18 1/2	18 1/2	35 1/4	35 1/4	26	37	89 1/2	90
6	...	...	...	...	28 1/2	28 1/2	18 1/2	18 1/2	35 1/4	35 1/4	26	37	89 1/2	90
7	...	...	...	...	29	29 1/2	21	21	36	36	29	38	86	86
8	...	...	...	...	29	29 1/2	21	21	36	36	29	38	86	86
9	68 1/2	68 1/2	...	...	29	29 1/2	21	21	36	36	29	38	86	86
10	...	...	...	...	29 1/2	29 1/2	19	19	...	...	31	34	85 1/2	85 1/2
11	...	...	...	...	29 1/2	29 1/2	19 1/2	19 1/2	...	...	31	34	85 1/2	85 1/2
12	67	67	...	...	29 1/2	29 1/2	18 1/2	18 1/2	...	...	31	34	86	86
13	...	...	...	...	29 1/2	29 1/2	19	19 1/2	...	...	31	34	86 1/2	86 1/2
14	...	...	...	...	29 1/2	29 1/2	19 1/2	19 1/2	...	...	31	34	86 1/2	86 1/2

*Free on board, switched and delivered. †Free on board or switched. ‡On track.

During the week ending April 18 Prime Contract Timothy sold at \$2.25@3.25 per cental; Prime Contract Clover Seed at \$7.60@7.85; Hungarian at \$0.65 @0.75; German millet at \$0.75@1.00; buckwheat at \$0.55@0.70 per 100 pounds.

During the week ending April 25 Prime Contract Timothy sold at \$3.20@3.35 per cental; Prime Contract Clover Seed at \$7.75@8.25; Hungarian at \$0.65 @0.75; German millet at \$0.70@1.00; buckwheat at \$0.55@0.90 per 100 pounds.

During the week ending May 2 Prime Contract Timothy sold at \$3.20@3.30 per cental; Prime Contract Clover Seed at \$7.40@7.65; Hungarian at \$0.65 @0.85; German millet at \$0.75@1.00; buckwheat at \$0.75@0.90 per 100 pounds.

During the week ending May 9 Prime Contract Timothy sold at \$3.30@3.35 per cental; Prime Contract Clover Seed at \$6.25@7.00; Hungarian at \$0.70 @0.85; German millet at \$0.75@1.00; buckwheat at \$0.40@0.60 per 100 pounds.

EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending May 9, as compared with same weeks last year, have been as follows:

Articles.	For week ending May 9. May 11.		For week ending May 2. May 4.	
	1896.	1895.	1896.	1895.
Wheat, bushels.....	452,000	1,024,000	429,000	619,000
Corn, bushels.....	1,630,000	975,000	1,964,000	884,000
Oats, bushels.....	747,000	8,000	553,000	5,000
Rye, bushels.....	84,000	...	44,000	...
Flour, barrels.....	199,400	294,000	199,800	210,000

FLAXSEED AT CHICAGO.

The receipts and shipments of flaxseed at Chicago during the 21 months ending with April, as reported by S. H. Stevens, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	1895 96.	1894 95.	1895 96.	1894 95.
August.....	1,277,850	1,306,250	538,860	429,373
September.....	1,799,050	751,300	1,158,128	375,713
October.....	1,975,450	801,350	1,028,467	351,833
November.....	1,202,300	428,800	462,422	143,733
December.....	817,650	459,962	452,984	111,931
January.....	493,900	92,950	214,513	70,016
February.....	359,700	85,800	189,892	105,912
March.....	384,450	75,900	303,301	64,456
April.....	247,500	52,250	259,137	49,545
May.....	...	88,000	...	196,801
June.....	...	86,900	...	37,885
July.....	...	114,950	...	33,379
Total bushels.....	8,537,850	4,342,412	4,606,704	1,970,557

INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector D. W. Andrews, the grain received at Chicago during the month of April, 1896, was graded as follows:

Railroad.	White.				Hard.				Red.				No Grade
	2	3	4	1	2	3	4	1	2	3	4	1	
C. B. & Q.....	1	1	...	...	8	8	...	3	28	5	...	...	...
C. R. I. & P.....	8	5	...	...	...	...	...	...	...
Chicago & Alton.....	5	5	...	...	...	...	...	...	...
Illinois Central.....	2	5	...	6	...	...	...	...	...
Freeport Div. I. C.....
Galena Div. C. & N. W.....
Wis. Div. C. & N. W.....
Wabash.....
C. & E. I.....
C. M. & St. P.....
Wisconsin Central.....
Chicago & Great West.....
A. T. & S. Fe.....	6	5	...	...	1	4	3	...	...
E. J. & E.....
Through and special.....	1	...	...	15	1	...	...	...	...
Total each grade.....	1	5	...	...	11	31	...	35	56	30	...	...	5
Total winter wheat.....	1	5	...	...	11	31	...	35	56	30	...	...	125

SPRING WHEAT.														
Railroad.	Northern.				No Grade.	White.				Colo- rado.		Mixed Wheat.		
		2	3	4		2	3	4	2	3				
C. B. & Q.....				1										
C. R. I. & P.....	1	7	28	2										1
Chicago & Alton.....														
Illinois Central.....														
Freeport Div. I. C.....														
Galena Div. C. & N. W.....			1	29	13					3				
Wis. Div. C. & N. W.....				5	1			5						5
Wabash.....				5	1									
C. & E. I.....														
C. M. & St. P.....	2			10	7			8						1
Wisconsin Central.....				1										
Chicago & Great West.....				3	2			1						
A. T. & S. Fe.....				2										
E. J. & E.....		2		25	1									
Through and special.....														
Total each grade.....	6	10	108	31	14				3					7
Total spring wheat.....					169					3				7

ELEVATOR

GRAIN NEWS

A new elevator has been completed at Carson, Iowa.

Robert Gardner is now buying grain at Grauville, Iowa.

Fred Richards is erecting an elevator at Richards Station, Ill.

W. S. Jackson has closed his elevator at Idaho Falls, Idaho.

O'Hara Bros'. large new elevator at Carlock, Ill., is nearing completion.

A stock company of farmers is going to build an elevator at Elkhorn, Man.

P. T. Johnston & Co., dealers in seeds, etc., at Victoria, B. C., assigned recently.

Penny & Co., grain dealers of Lincoln, Neb., have closed their elevator at that place.

The new flax mill at Whatcom, Wash., will be completed in time for the next crop.

Brown & Steele have purchased the grain business of O. A. Worthing at Redlands, Cal.

Jewett & Canney, dealers in grain and hay at Ipswich, Mass., have dissolved partnership.

Ellickson Bros. have begun work on an elevator at Thompson, Iowa, which will be 26x32 feet.

Ex-Auditor Coover of Fowler, Ind., will remove to Remington and engage in the grain business.

John T. Dann is now operating an elevator and carrying on a grain business at Danbury, Conn.

The Albert Landreth Seed Co. of Manitowoc, Wis., has changed its name to the Albert Landreth Co.

A farmers' elevator will be built at Ninga, Man., a company having been organized for that purpose.

F. S. Kingsbury has bought and will carry on the grain business of S. S. Dun & Son at Chancellor, S. D.

A company has been organized for the erection of a cotton seed oil mill at Colorado, Texas, at a cost of \$40,000.

Wright & Haughey, grain and produce commission merchants of Chicago, Ill., have dissolved partnership.

E. E. Tyson, dealer in grain, feed and coal at York City, Pa., has added a general store to his other business.

The Riverside Irrigation Co. has completed a rice mill at Jennings, La., which has 300 barrels' daily capacity.

The Farmers' Elevator & Mercantile Co. has been incorporated at Hayfield, Minn., with a capital stock of \$10,000.

G. T. Elliott, miller of Sterling, Ill., has removed his elevator at that place to a better location in the same town.

It is reported that the Farmers' Cooperative Union of Yuba City, Cal., is doing a big business in the grain trade.

E. W. Mathews has succeeded E. W. Mathews & Son, dealers in grain, hardware, etc., at Montgomery, Ind.

The Cereal Distilling Co. at Lawrenceburg, Ind., has increased its capacity, and now uses 800 bushels of corn daily.

The Sparks Milling Co. of Alton, Ill., will erect an elevator at that place, which will have a capacity of 85,000 bushels.

Danielson & Nannestrod have succeeded J. A. Danielson, grain dealer and general merchant of Lake Park, Minn.

R. J. Matthias and others are erecting a potato and grain distillery at Manawa, Wis., which will be completed by June 1.

M. L. Berry & Co. have succeeded to the firm of Berry & Thomas, commission dealers in grain, flour, etc., at Providence, R. I.

Jacobs & Brower, grain dealers of San Jose, Ill., have 40,000 bushels of corn in crib which they are holding for better prices.

Francis A. McCoy, grain and stock dealer of Clayton, Mo., assigned recently. Assets are estimated at \$7,600; liabilities \$20,000.

The Anchor Grain Co. has been incorporated at Superior, Wis., with a capital stock of \$1,000, to do a general grain and commission business and

construct elevators. The incorporators are W. E. Hoehle, F. L. Davis and W. H. Knowlton.

J. E. Galbraith, dealer in grain, hay, etc., at Seattle, Wash., has organized the Galbraith Grain Co. to continue his business.

Scott & Armstrong intend to erect an elevator at Rising, Ill., this summer, which will be completed in time for the new crop.

The Galveston Wharf Co.'s elevator at Galveston, Texas, has been temporarily closed in order to make repairs and improvements.

James Kitchen's elevator at Mattoon, Ill., is nearing completion, and is locally reported to be "assuming alarming proportions."

Gilmore & Franks, grain dealers of Gridley, Ill., have placed a new gas engine in their elevator, the old one not being large enough.

Clem R. Schaer, dealer in grain, feedstuffs and flour at Little Rock, Ark., assigned recently with assets and liabilities about even.

The Riverside Land and Irrigation Co. of Jennings, La., have ordered several special rice machines of Nordyke & Marmon Co.

A grain elevator will be built at Rockford, Wash., during the summer, and will be completed in time to handle this year's crop.

O. O. McLeland & Co. have succeeded to J. R. Bowlin's elevator at Kempton, Ind., where they have engaged in the grain business.

Weston Birch, who has been in the grain business at St. Louis, Mo., has engaged in the grain commission business at Kansas City.

The recently organized Grangers' Elevator Co. has decided to build an elevator at Manito, Ill., and carry on a cooperative grain business.

Milmine, Bodman & Co., grain commission merchants of Chicago, are erecting a large elevator at Ogden, Ill., where they will buy grain.

J. H. Leonard, a well-known business man of Kansas City, Mo., has engaged in the grain and hay commission business at that place.

Dupes, Thompson & Co. is the name of a new firm recently organized at North Bluff Springs, Ill., to carry on an extensive grain business.

John Higginbotham, who is engaged in the grain business at Bayard, Iowa, has 40,000 bushels of corn and 40,000 bushels of oats in store.

The Arkansas Valley Cotton Oil Co. has been incorporated at Dardanelle, Ark., with a capital stock of \$25,000. Joseph Evans is president.

The A. T. Lowry Grain Co. has been incorporated at Rockville, Mo., with a capital stock of \$2,000. The incorporators are A. T., L. V. and C. B. Lowry.

M. C. Ott, grain dealer of Wilton, Iowa, has decided to rebuild his elevator, which burned recently, and the preliminary work has been commenced.

Lemaire Bros., dealers in grain and hay at Taunton, Mass., have purchased property at Whittenton, where they will erect a hay and grain storehouse.

Geo. L. Woolsey of New York City is reported to represent a syndicate which will at once begin the erection of a large distillery at Terre Haute, Ind.

Whitaker & Bishop, grain dealers of Monarch, Ill., have put a new feed mill in their elevator and will grind feed in connection with their grain business.

It is reported that a large warehouse and elevator is to be erected at Pittsburg, Pa., adjoining Henderson, Johnston & Co.'s plant, which was erected last year.

The Birmingham Cotton Oil Co., which was recently incorporated at Birmingham, Ala., will erect a cotton seed oil mill of 120 tons' capacity per 24 hours.

The B. A. Lockwood Grain Co. is reported to be very busy at its elevator at Ames, Iowa. In one day recently there were twenty cars of oats in the yards.

The Holloway Seed Co. of Dallas, Texas, has been incorporated with a capital stock of \$5,000, by Geo. R. Holloway, W. E. Shuttles and Thomas James.

The Great Western Grain Co. has been incorporated at Chicago, with a capital stock of \$25,000, to engage in the grain business. The incorporators are Chas. B. Burt, Edwin W. Mosher and A. Fred. Rioux.

H. W. Allsop, a prominent grain dealer of Williamstown, Mass., disappeared from his home April 29, and his whereabouts are unknown. He went to North Adams on business, which was the last seen of him.

The firm of Owens & Perry, grain dealers of Aberdeen, S. D., have purchased the rights and property interests of the Northwestern Elevator Company, on the Great Northern tracks at that place, as the elevator company has decided to withdraw from

that territory. The new firm will at once begin the erection of a large elevator on the site of the one destroyed by fire some time ago.

Eversole Bros. of Hindsboro, Ill., have let the contract to Kirby & Peck for an elevator to be erected at Fithian, Ill., where they will engage in the grain business.

The firm of Rankin & Durkee, wholesale dealers in grain, millstuffs and flour at Lake Geneva, Wis., has been incorporated with a paid up capital stock of \$30,000.

The B. S. Constant Co., Bloomington, Ill., is making plans for a large country elevator in connection with the new mill for A. D. Derrough of Sidney, Ill.

Frank Novak of Walford, Iowa, grain buyer and general merchant, was recently robbed of \$2,000 by burglars who broke into his store and blew open the safe.

The officers of the new farmers' elevator at Richwood, Wis., report a satisfactory business. Stock in the sum of \$5,000 was issued, and most of it has been subscribed for.

The Sioux City Nursery & Seed Co. of Sioux City, Iowa, recently went into the hands of a receiver. Liabilities \$90,000; assets \$180,000. Business will probably be resumed.

At Elkhart, Ill., there is stored in cribs 100,000 bushels of ear corn, the property of two local firms. They also have about 20,000 bushels of oats in bins, all of last year's crop.

Ploog Bros. have purchased from Stewart & Moeller of Berlin, Iowa, the elevator formerly operated by H. B. Plett, and will engage in the grain business at that place.

Herely Bros., dealers in grain and feed at 448 N. Halsted street, Chicago, Ill., will build an elevator of 75,000 bushels' capacity at Carl avenue and Clinton street, Chicago.

W. A. Leamer, flour miller of Wilton, Iowa, is about to engage in the grain business. Bins will be erected, elevator machinery put in, and there will be a side track to the mill.

C. B. Woods & Co., flour millers of Monterey, Mexico, failed recently. The liabilities are \$105,000, assets \$90,000. A number of United States grain men are among the creditors.

C. W. Pearson & Co., grain merchants of Rochester, N. Y., have dissolved. Geo. W. Prentice retiring. C. W. Pearson will continue the business, which has been very prosperous.

The West Concord Farmers' Mercantile & Elevator Co. has been incorporated at West Concord, Minn., to conduct a general grain and commission business. The capital stock is \$3,000.

Leigh & Moore, formerly Howe, Leigh & Co., who deal in grain, coal, lumber, etc., at Radcliffe, Iowa, intend to increase their business, and write us that they will soon erect another elevator.

Herb & Son, grain dealers of Emington, Ill., are remodeling and improving their elevator at that place, and will double the capacity so as to be able to take care of their increasing business.

The Wichita Mill & Elevator Co. has been incorporated at Wichita Falls, Texas, by M. Lasker, Galveston; Joseph A. Kemp, Wichita Falls; Frank Kell, Morgan Jones and W. E. Kaufman.

B. F. Watson of Chesterville, Ill., is going to put in the B. S. Constant Self-feeder, which will take the place of drag belts, to feed the sheller and bring the small grain from the deep bins to the elevators.

F. R. E. Wight & Co., grain and freight brokers of Montreal, Ont., dissolved recently, and a new partnership has been formed by the admission of C. B. Esdale. The name of the new firm is Wight & Esdale.

J. B. Ham & Co., grain dealers, have purchased land at Lewiston, Maine, and will soon begin the erection of an elevator. It will be one of the finest elevators in Maine, and equipped with all modern appliances.

J. L. Sponsler, formerly of the News of Hutchinson, Kan., has purchased a half interest in the Hutchinson Feed & Grain Co., being an equal partner with B. K. Ringle. They expect to carry on an extensive business.

Marks, King & Co. have added an oat clipping machine to their cleaning elevator at Port Arthur, Ont. A trial made on a car of mixed oats which weighed only 32 pounds per bushel showed that after clipping they weighed 42 pounds.

The Winnebago City Warehouse Association of Winnebago City, Minn., has decided to continue its organization, which was to terminate May 1. A 40,000-bushel elevator will be built. The directors stated to the stockholders that they did not intend to declare any dividend, as the institution is not for that purpose. It will be its aim

to "keep prices up, and protect producers against any attempt on the part of grain buyers to eliminate competition by pooling their interests."

John Smiley is rebuilding his elevator at Watseka, Ill., which was burned recently. He will put in the B. S. Constant Co.'s Elevator Cleaners in the heads of the elevators, and also that company's watertight elevator boots.

The Canadian Pacific Railway Co. has plans ready for a new 1,500,000-bushel elevator to be built at Fort William, Ont. F. E. Gibb, grain inspector at that point, reports that there is not enough storage room there, all the elevators now being full.

The National Linseed Oil Co. will rebuild its elevator at Burlington, Iowa, which burned some time ago. There will be two steel tanks 40 feet high, 50 feet in diameter and each with a capacity of 63,000 bushels. An engine house will be attached.

Geo. H. Sidwell & Co., grain commission merchants of Chicago, have torn down their old elevator at Hinckley, Ill., as it was considered unsafe, and are erecting a new one in its place. The barn builders must have made a good profit on the old house.

The distilleries of the American Spirits Distilling Mfg. Co. at Peoria, Ill., which have been running at their greatest capacity for some months, using an enormous quantity of corn, will cease operations early in June for their regular summer shut-down.

Work will soon be under way on the construction of the new elevator and warehouses at New Orleans, La., which the Illinois Central Railroad will erect. The total amount of lumber ordered is 4,586,000 feet. Jas. Stewart & Co. have the contract.

Plans have been made for the conversion of the Merchants' and Planters' rice elevator at Charleston, S. C., into a corn and wheat elevator with a capacity of 250,000 bushels. L. A. Emerson, traffic manager S. C. & G. R. R., can be addressed for information.

The Eagle Rice Milling Co. has been incorporated at Crowley, La., with a capital stock of \$50,000 for the purpose of milling rice, etc. The incorporators are S. A. Pickett, John E. Platt, C. W. Pickett and Gus E. Fontenot. A meeting will be held in July to elect officers and directors.

Sheehan & Sanderson, who claimed to represent Everts & Co. of Detroit, carried on a grain and stock brokerage business at Lansing, Mich., for some months, but disappeared April 23. Now it turns out that several deals have not been reported, and local parties have lost money.

A 100,000-bushel elevator is to be erected at Broad and Huntingdon streets, Philadelphia, Pa., for George Egolf, dealer in flour and feed. The elevator will be of handsome design, having a front of Pompeian brick with trimmings and base of granite. The plans were drawn by A. C. Wagner.

C. B. Congdon & Co., commission merchants of Chicago, Ill., have made arrangements to have W. S. Hanford represent them on the New York Produce Exchange. Mr. Hanford formerly represented Robt. Lindblom & Co., and will continue to represent Geo. H. Daggett & Co. of Minneapolis.

R. J. Riley & Co. have engaged in the grain business at Fairbury, Ill., having purchased G. M. Kime's elevator at that place. Mr. Riley will have personal supervision of the business. H. Wendal, the other member of the firm, has for several years carried on a successful grain business at Forrest, Ill.

J. J. Hiddleston, manager of the Moore Grain & Elevator Co. of Kansas City, reports prospects for a good business the coming season. The company expects to export a good deal of grain via gulf ports, and Mr. Hiddleston recently paid a visit to Galveston, Texas, for the purpose of investigating the facilities at that port.

Wm. H. Wallace, an old and well-known grain commission merchant of New York City, retired from active business May 1. His grain business will be continued by Wm. G. Starr and Chas. S. Kennedy Jr., under the firm name of Starr & Kennedy. Mr. Starr has been associated with Mr. Wallace for eighteen years, and Mr. Kennedy for eleven years.

The Lake Shore & Michigan Southern Railroad is building an elevator at Englewood, Ill., which will be completed about August 1. It will have a storage capacity of 40,000 to 50,000 bushels of oats, and facilities for transferring 125 cars per day. It will have all the latest improved machinery and appliances. O. B. Smith is superintending the construction.

The firm of Kennett, Hopkins & Co., commission merchants in grain, etc., of Chicago has been succeeded in New York City by Geo. B. Hopkins & Co. The new firm is composed of George B. Hopkins and Harry L. Terry. Some time ago, following the action taken by the Chicago Board of Trade against the Chicago firm of Kennett, Hopkins & Co., on the ground that members of that firm had bucket shop connections, the governing committee of the New

York Stock Exchange instructed Mr. Hopkins to dissolve the partnership. In Chicago the firm has been succeeded by Kennett, Harris & Co. The two firms have no relations with each other.

The A. H. Weeks Company was recently organized at Fort Fairfield, Maine, for the purpose of buying, selling and doing a general business in potatoes, hay, grain and farm products of all kinds, with \$50,000 capital stock, of which \$32,000 is paid in. The officers are: President, William H. Poole of Fort Fairfield; treasurer, Asa H. Weeks of Somerville, Mass.

J. F. Greening of New Berlin, Ill., writes us that he will open a grain brokerage office at Jacksonville, Ill., May 18. He will represent the well-known houses of Tate, Muller & Co. of Baltimore, and Paddock, Hodge & Co. of Toledo, and will have connections in New York, Chicago and St. Louis. He will make a specialty of buying all kinds of grain on track.

Requa Brothers, grain commission merchants of Chicago, Ill., have placed new machinery in their elevator at Forty-fourth street and the Wabash tracks to increase the working capacity to handling 25 cars of grain, in and out, daily. They have recently removed their offices from 2 and 4 Sherman street to very suitable rooms in the Board of Trade Building.

The Interstate Elevator Co., which was lately incorporated at Winona, Minn., has bought two large elevators at Jewell Junction, Iowa. The company also has elevators at Ellsworth, Radcliffe, Stanhope, Blairsburg and other points, and it is reported that other stations will be added. The farmers are beginning to raise a howl of a combine being formed to keep down the price of grain.

The firm of H. O. Armour & Co. of New York City was dissolved May 1 by mutual consent, and is succeeded in its grain business by the new firm of F. V. Dare & Bro. The old firm was composed of H. O. Armour and Fred V. Dare. In the new firm Mr. Dare takes into partnership with him his brother, Edward H. Dare. The latter has been the cashier of H. O. Armour & Co. for eighteen years. Fred V. Dare has been associated in business with H. O. Armour for twenty-seven years, and has been his partner since 1884.

It begins to look as if there was one thing farmers in and about Madelia could not manage, and that is the "farmers' warehouse." A suit has just been brought against the company for nearly \$10,000 by local parties, who are suing to get their rightful dues. It seems there was dealing in options with either a St. Paul or Minneapolis firm, and they may be brought into the matter before it is settled. The farmers' company has a very fine elevator, and by selling the plant will be able to discharge all obligations. Whether it will be able to buy grain this fall will be a doubtful matter.—Pioneer-Press, St. Paul, Minn.

C. O. Bartlett of Cleveland, Ohio, reports the following partial list of recent sales: Triumph Corn Shellers to Weber & Co., Kirkville, Mo.; J. C. Richards, Johnstown, N. Y.; Peter Snyder, Minoa, N. Y.; Elevating and conveying machinery to Diamond Linseed Oil Co., Elyria, Ohio; one conveying outfit for conveying crushed rock, the F. D. Cummer & Son Co., Cleveland, Ohio. Two mustard mills, Stephens & Widlar, Cleveland, Ohio; elevating and conveying machinery to Cleveland Dryer Co., Cleveland; one cement mill, Diamond Portland Cement Co., Middle Branch, Ohio; one elevator, Rose & Noble, Rosemont, Ohio.

The Galveston Export Commission Co. of Galveston, Texas, has inaugurated a movement among the farmers of Nebraska, Kansas and Oklahoma on railroads running into Wichita, Kan., to erect an elevator at Wichita to have a capacity of 500,000 or 1,000,000 bushels. The Galveston company offer to erect the elevator if the farmers will cooperate—and in short advance the necessary funds, which will be secured by first mortgage liens. Of course the farmers are expected to ship to the Galveston Export Commission Co., and in return they are assured that the value of grain will be increased "several cents." The farmers do not seem to think there is anything risky about this scheme, nor do they ask why the Galveston company does not erect its own elevator. At a large meeting held on May 2 the project was indorsed, and committees are now at work on the preliminary arrangements.

The Farmers' Coöperative Elevator & Mercantile Co. has been organized at Owatonna, Minn., with a capital of \$20,000—and \$3,000 actually subscribed. The aim of the Company, as set forth in the constitution, is "the buying, selling, receiving, storing, forwarding and handling wheat and other cereals and products thereof; also farm products of every description; also fuel, implements, machinery, lumber and farm supplies of every description; to purchase, erect, maintain and control warehouses and elevators for the storage of wheat and other cereals and the products thereof; to act in the capacity of a general commission merchant; to purchase and retain, sell, convey, lease, mortgage, encumber or im-

prove such real estate, buildings and personal property as the business may require, within the state of Minnesota." For anyone but farmers coöperating this seems to be enough business for half a dozen companies. The following were named as a board of directors: G. Boshard, J. Morley, J. Healey, R. Crickmore, F. Fisher, C. Bradlow, James McCartin, C. H. Fisher and P. O'Ruen, all farmers. It is expected that a new elevator will be commenced at once. The following officers were elected: J. R. Morley, president; J. H. Healey, vice-president; Robert Crickmore, secretary; G. Boshard, treasurer.

Court Decisions

Evidence as to the Value of Hay.

The Appellate Court of Indiana, according to a decision reported in the Drovers' Journal, does not credit a man with being competent to pass upon the value of hay unless he has seen it. The case of Burke vs. Howell was an action for damages for the destruction of hay. One witness testified that he had been dealing in hay for five or six years, that he had lived many years in the vicinity where the hay was destroyed and was acquainted with the character of the hay grown there; another that he lived in the vicinity for a number of years and was acquainted with the character of the hay destroyed. It did not appear that either of them had seen the hay in controversy, or was acquainted with the market price of the hay. Held that the testimony of either of them as to the value of the hay was not admissible.

Railroad—Shipment—Liability.

The Supreme Court of Minnesota held, in the case of Ratzer vs. Burlington, Cedar Rapids & Northern Railway Company, that where the shipper of goods consigned them to himself and received a bill of lading from the railway company accordingly, and the railway company delivered them with a proper waybill to the next connecting railway company, who, at the shipper's request, delivered the goods to him in transit at an intermediate point, without the surrender or cancellation of the bill of lading, which he thereafter, and before the goods would have arrived at the original destination if the transit had continued, pledged in the usual course of business to an innocent pledgee for value, the latter railway company was liable to the pledgee for failure to deliver the goods at the place of destination, and was estopped from showing such intermediate delivery to the shipper.

Mortgage on Crops—Debt.

In the case of Donovan vs. Sell, recently decided by the Supreme Court of Minnesota, it appeared that in September, 1893, the plaintiff, as security for a debt payable in September, 1894, executed to defendant a mortgage on crops of grain to be raised on the defendant's farm during the season of 1894. By the terms of the mortgage the mortgagor was to remain in possession as long as its covenants and conditions were fulfilled, but it was also provided that if the mortgagor should make any attempt to dispose of the property, thereupon the mortgagee should have the right to take possession. Shortly afterward the plaintiff, as security for a debt payable in October, 1894, executed another chattel mortgage of like terms on the same property to another person. The court held that the execution of the second mortgage was not an attempt to dispose of the property within the meaning of the provisions of the first mortgage.

Conversion of Stored Wheat.

The Supreme Court of Indiana recently held that: A warehouse receipt reciting: "Received of J. T. (for Burket Grain Elevator) 126 bushels 20 pounds wheat, test 59 weight at stored per bushel; fire and heating at owner's risk," sufficiently shows that the wheat was received for storage only, and was not sold. And that such receipt is a substantial compliance with the law of that state, providing that every public warehouseman shall, on demand, give a receipt for goods "setting forth the brand, quality, quantity, kind and description thereof, which shall be designated by some mark." Also, that on trial, under the laws of that state forbidding a warehouseman to dispose of goods stored without the written consent of the holder of the warehouse receipt, where it was shown that the wheat wrongfully disposed of was stored in the defendant warehouse at the owner's risk, and there was no evidence that it was sold to the warehouseman, or that it was agreed that wheat of a like kind and quantity could be taken out by the holder of such receipt, a request on the part of such warehouseman, the defendant, that the court charge the jury that he could dispose of such wheat as he pleased "if the wheat was purchased to be paid for on demand, or if the agreement was that wheat of like kind and quantity might be taken" should be refused by the court. Miller vs. State, 43 Northwestern Reporter, 440.

Fires - Casualties

J. F. Bartow, grain dealer of Plankinton, S. D., recently sustained a loss by fire.

C. B. Bartlett & Co., grain dealers of Meckling, S. D., recently sustained a loss by fire.

The elevator at Versailles, Mo., was destroyed by fire May 6, together with considerable grain.

The elevator and stock yards at Eldridge, Iowa, was destroyed by fire April 17. Loss \$10,000.

Johnson & Highman's elevator at Mt. Vernon, Ind., was damaged by fire April 21; loss \$1,000.

An elevator at Little York, Ill., containing 18,000 bushels of grain, was recently destroyed by fire.

The Pleasure Ridge Park Distillery at Louisville, Ky., was burned recently, the loss being \$400,000. It was fully insured.

The Farmers' Elevator at Lake Preston, S. D., was destroyed by fire April 27, together with 15,000 bushels of grain. Its origin is unknown.

The Erwin Buying & Shipping Association, grain dealers of Erwin, S. D., recently sustained a loss by fire of \$6,000.

M. D. Stanley, dealer in grain and feed at New Britain, Conn., recently suffered a loss by fire. He carried no insurance.

T. E. Battle's barn at Marlin, Texas, was destroyed by fire at 1 a. m., April 22, together with 3,000 bushels of grain, etc.

James Cole's elevator at Elmo, Ill., was destroyed by fire April 21. There was very little grain in it. Loss \$3,000; insurance \$1,000.

The loss on elevator A2 at Minneapolis has been adjusted at \$122,500, being \$35,000 less than the face of the insurance policies.

Henry Vogt's elevator and flour mill at Wamego, Kan., was destroyed by fire on the night of April 30. Loss \$40,000; two-thirds insured.

M. Richardson & Co.'s granary at Flesherton, Ont., and 20,000 bushels of grain, were destroyed by fire on the night of April 29. Loss \$8,000; insured.

J. T. Kirkendall's elevator at Americus, Kan., was destroyed by fire May 12, together with 4,000 bushels of grain. Loss on elevator \$2,000; fully insured.

In the fire which recently destroyed the Charles Church Milling plant at Trempealeau, Wis., 6,000 bushels of wheat and a quantity of oats were destroyed.

The old Hart Elevator at Racine, Wis., which was used as a general storehouse, sustained damage by fire on the morning of April 18, entailing a loss of \$2,500. Insurance, \$2,050.

John L. Smiley's elevator at Watseka, Ill., was destroyed by fire April 15, causing a loss of about \$3,000. Insurance, \$1,800. There was only a small amount of grain in the house. It will be rebuilt immediately.

John Seymour's grain warehouse at Foraker, Ohio, was burned at 3 a. m., April 23, causing a loss of \$700. There was no insurance. This is the third warehouse of Mr. Seymour's that has been destroyed by fire.

A large granary and machine shed belonging to William Mills of Andover, S. D., was destroyed by fire May 7, together with 2,000 bushels of wheat. Loss \$3,500; insurance \$1,000. The origin of the fire is unknown.

Westfall & Durbin's elevator at Brown's Valley, Minn., slid off its foundation on the night of May 5. It was full of wheat. It pays to have an elevator erected by reliable builders; then accidents are anticipated and avoided.

Livingston & Dietz', office and grain, feed and fuel sheds at 1001 Halsted street, Chicago, were destroyed by fire on the night of May 7. Two sheds 75 feet long stored with hay, etc., were destroyed. Loss about \$10,000; covered by insurance.

The grain warehouse at Aurora, Ontario, owned by Jesse Smith, and occupied by W. A. Hutt, was recently destroyed by fire, together with a quantity of grain. The loss was partially covered by insurance. The fire was of incendiary origin.

Louis C. Bratrud, formerly a grain commission merchant of West Superior, Wis., but in later days a bucket shop speculator, was found dead on a street of Superior April 30, with a bullet hole through his heart. It is not known whether he committed suicide or was murdered.

Melhorn Bros' elevator at Blue Mound, Ill., which was operated by Hill Bros. & Crow, was destroyed by fire at 5 a. m., April 21, together with 4,000 bushels of corn, and three cars of wheat on a side-track. Loss on elevator, \$4,000; insurance, \$3,200;

loss on grain about \$1,000; insurance, \$800. The fire is supposed to have been caused by a locomotive spark or dust explosion.

Lightning recently struck a barn near Fox Lake, Wis., belonging to Cortis Calkins, and it was destroyed, together with an adjoining barn, and 1,000 bushels of oats, 700 of corn, and 15 tons of hay.

The Farmers' Elevator at Prague, Neb., was destroyed by fire at 2:15 a. m., on April 23, it being the second time the building caught fire within eight months. The origin of the fires is unknown; the elevator had not been operated since it was built. There was an insurance of \$1,300.

The elevator at Catlin, Ill., belonging to D. Gregg of Danville, was destroyed by fire at 4 p. m., April 30. The origin of the fire is supposed to have been a spark from a locomotive. There were 600 bushels of oats, 200 of corn, and 200 of wheat in the house, and it is said that there was no insurance.

Azel Dinsmore, an old man and an employe in E. H. Lothrop's grain store at West Bridgewater, Mass., recently met with a serious though not fatal accident. He was passing through a narrow passageway between sacks of grain, when several sacks fell on him and pinned him to the floor. His spine was badly injured.

Jacobs & Lyons' elevator at South Kaukauna, Wis., was destroyed by fire on the night of April 10, together with considerable grain, and 100 bushels of clover seed. Loss \$2,000; insurance on building, \$300, on stock and contents, \$1,100. Its origin is unknown. The elevator will probably be rebuilt on an enlarged scale.

The Brandon Farmers' Warehouse Company's elevator at Brandon, Minn., containing 25,000 bushels of wheat belonging to farmers, settled down on account of soft ground and fell over onto the tracks of the Great Northern Railway on the night of April 28. The loss on the wheat will be heavy. The building, worth \$3,500, was totally wrecked.

The Big Four elevator and warehouse at Vanlue, Ohio, which was operated by Westcott Bros., caught fire from a spark from a locomotive on the Big Four tracks May 6, and were destroyed. There were 5,000 bushels of corn, and 3,000 bushels of wheat in store, which were also destroyed. The railroad's loss will be \$3,000, Westcott Bros' \$5,000; partially covered by insurance.

Late Patents

Issued on April 7, 1896.

Baling Press.—Lewis W. Franks, Buda, Texas. No. 557,573. Serial No. 550,999. Filed May 29, 1895.

Corn Sheller Attachment.—Berthold A. Kamp, Evansville, Ind. No. 557,585. Serial No. 566,277. Filed Oct. 19, 1895.

Automatic Scale Register.—Frank R. Moser, St. Louis, Mo. No. 557,858. Serial No. 556,672. Filed July 22, 1895.

Issued on April 14, 1896.

Grain Scourer and Separator.—Elgin Keith, Silver Creek, N. Y., assignor to the S. Howes Co., same place. No. 558,182. Serial No. 540,574. Filed March 5, 1895.

Hay Press.—Elmer J. Shirley and Chas. W. Merrill, El Modena, Cal.; Mr. Merrill, assignor to Mr. Shirley. No. 558,216. Serial No. 557,410. Filed July 29, 1895.

Gas Engine.—John W. Eisenhuth, San Francisco, Cal. No. 558,369. Serial No. 543,830. Filed March 30, 1895.

Gearing for Gas or Explosive Engines.—Daniel S. Regan, San Francisco, Cal.; Annie F. Regan, administratrix of Daniel S. Regan, deceased, assignor of one-half to Sanford Bennett, same place. No. 558,420. Serial No. 485,665. Filed Sept. 16, 1893.

Issued on April 21, 1896.

Grain Drier.—John S. Metcalf, Chicago, Ill. No. 558,508. Serial No. 543,466. Filed March 28, 1895.

Baling Press.—Merritt I. Tuttle, Mather, Wis., assignor of one-half to Jas. H. Palmer, Chicago, Ill. No. 558,624. Serial No. 520,450. Filed Aug. 16, 1894.

Electrically Controlled Gas Engine or Motor.—Geo. L. Thomas, Montclair, N. J. No. 558,749. Serial No. 568,573. Filed Nov. 11, 1895.

Hay Press.—Charles A. Anderson, Cale, Ind. Ter. No. 558,754. Serial No. 560,921. Filed Aug. 29, 1895.

Portable Elevator.—Michael McCarthy and John H. Wehmhoff, Dalton City, Ill. No. 558,829. Serial No. 568,529. Filed Nov. 11, 1895.

Issued on April 28, 1896.

Hemp and Flax Cleaner.—Albert Angell, East Orange, N. J., assignor by direct and mesne assignments to Marcus P. Ward and Isaac M. Williams, Orange, N. J. No. 558,921. Serial No. 558,349. Filed Aug. 15, 1895.

Vapor Motor.—Levi S. Gardner, New Orleans, La., assignor of one-half to Jefferson C. Wenck, same

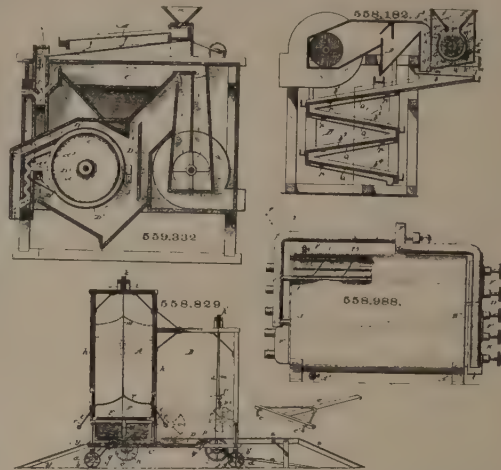
place. No. 558,943. Serial No. 552,834. Filed June 14, 1895.

Grain Drier.—Wm. W. Saunders, Chattanooga, Tenn. No. 558,988. Serial No. 567,375. Filed Oct. 30, 1895.

Gas Engine.—Jas. M. Worth, Chicago, Ill. No. 559,017. Serial No. 533,854. Filed Jan. 4, 1895.

Cotton Seed Delinter.—Jas. J. Faulkner, Memphis, Tenn., assignor by direct mesne assignments to the Standard Cotton Seed Co. of Arkansas. No. 559,056. Serial No. 556,491. Filed July 19, 1895.

Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 559,209. Serial No. 554,944. Filed July 5, 1895. Also, No. 559,209, serial No. 554,944, filed July 5, 1895; No. 559,210, serial No. 555,297, filed July 8, 1895; No. 559,212, serial No. 558,492, filed



Aug. 7, 1895; No. 559,213, serial No. 558,815, filed Aug. 10, 1895; No. 559,214, serial No. 558,956, filed Aug. 12, 1895; No. 559,215, serial No. 562,839, filed Sept. 18, 1895.

Hay Press.—Andrew C. Miller and Edward A. Johnson, Commerce, Mo.; Mr. Miller, assignor to Mr. Johnson. No. 559,303. Serial No. 554,122. Filed June 26, 1895.

Grain Cleaning and Scouring Machine.—Chas. S. Jackson, Paulding, Ohio, assignor of one-half to James M. Neer, Westerville, Ohio. No. 559,332. Serial No. 585,018. Filed Jan. 25, 1895. Renewed March 26, 1896. Serial No. 585,018.

Issued on May 5, 1896.

Automatic Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 559,746. Serial No. 544,864. Filed April 8, 1895.

Weighing Machine.—Francis H. Richards, Hartford, Conn. No. 559,747. Serial No. 570,195. Filed Nov. 26, 1895. Also, No. 559,749, serial No. 575,220, filed Jan. 13, 1896; No. 559,751, serial No. 582,220, filed March 7, 1896.

Pneumatic Grain Conveyor.—Jas. B. Schuman, Columbia City, Ind. No. 559,615. Serial No. 559,547. Filed Aug. 16, 1895.

PERSONAL

C. M. Morse, secretary of the Marfield Elevator Co. of Winona, Minn., was married April 23 to Miss Merigold.

Benjamin H. Woodworth, with F. H. Peavey & Co. of Minneapolis, was married April 15 to Miss Elizabeth M. Cushman.

William Carter has succeeded A. S. Barker in charge of Milmine, Bodman & Co.'s branch grain business at Jamaica, Ill.

William Crumpton of Crumpton & Crumpton, grain commission merchants of West Superior, Wis., has been made Chief of Police of Superior.

Edgar George, who has been associated with the grain house of Hancock & Co. at Philadelphia, has taken charge of that firm's business in New York City.

B. W. Mulford, formerly with the Great Western Elevator Co. of Minneapolis, has resigned his position and embarked in the flour and mill feed business.

W. J. Armstrong, who has been with Chapin & Co. of Milwaukee for several years, has accepted a position with C. R. Lull & Co., and will take charge of their Eastern grain and feed business.

Robert Bee, a well-known miller of Nashville, Tenn., and who for several years has had charge of the elevators at the Cumberland Mills, is reported to be seriously ill, and his life is despaired of.

Captain H. P. Turner, who has been in the grain business at Chatsworth, Ill., during the past 20 years, has had a long and adventurous life. For 50 years he was master of a vessel sailing the Atlantic, and has made over 100 trips to Cuba and adjacent islands.



The wise shipper says, Better a reputable commission man, than an unknown dealer.

Hunter & Son have succeeded Hunter & Hoffa, dealers in feed, hay, etc., at Ashland, Pa.

C. A. Robinson has purchased the business of John C. Leighton, dealer in hay, etc., at Portland, Ore.

If shippers weigh their hay carefully, give the number of bales and weight in each car, shortages would be less.

B. F. Weidman, dealer in hay at Lamar, Mo., recently suffered a loss on his property of \$3,000; insurance \$1,500.

The next National Hay Association's convention should be the largest yet held. Hay men never took so much interest in it as they do now.

Henry Reese's stock and feed barn at Creston, Iowa, was destroyed by fire April 25, together with 100 tons of hay. Total loss, \$3,500; small insurance.

Charles Wirick, a prominent hay commission man on the Kansas City market for several years, has gone to Arizona, where he will engage in the mining business.

According to advance sheets of the Year Book of Australia, there were cultivated in the season of 1894-95, 1,238,263 acres of hay, which yielded a total of 1,412,567 tons.

Fire destroyed the Lehigh Valley Railway Co.'s hay warehouse at Jersey City, N. J., and 40 or 50 cars loaded with hay. The loss is estimated at \$75,000. Insurance on building and contents, \$39,500, on common carriers' liability, \$7,500.

Shippers should understand that dealers will not buy hay direct of them when they can get it from commission merchants, except when they know there is going to be an advance. The shipper may think he has a good thing, but the dealer generally has a better.

The opposition of railroads is detrimental to the interests of a hay market, and their indifference is nearly as bad. They have long ignored Chicago's right to warehouses, and always will, unless determined efforts are made to secure them. Chicago hay men should have an association for the furtherance of this and other beneficial reforms.

In discussing the feeding value of hay substitutes Prof. J. B. Lindsey of the Massachusetts Experiment station says: "Vetch and oats furnish very nearly as much digestible matter in a ton as an extra quality of hay. The digestible protein in the vetch and oats is fully one per cent. higher than in the hay. Vetch and oats have the advantage over peas and oats in that the vetch stands up much better, and can be easily cut with a mowing machine."

Complaint is being made at Kansas City of the way hay is handled on the Belt Line railway. The Haymaker says that commission men are having the same trouble with the Belt Line as was experienced with all the roads a few years ago, these being a few of the inconveniences: Settlements for hay sold over this line are nearly always unsatisfactory; it takes almost as long to get returns from the Belt Line as when shipping East; cars invariably run short; stealing from cars is an easy matter, as no watchmen are employed. Reform is needed.

The warehouse of the Western Hay Company, at Kansas City, Mo., has been robbed since last fall, through the rascality of Jasper Radford, a colored employe of the company, of many tons of hay. J. M. Gibbons, manager of the company, estimates the loss at over \$1,000. According to a written confession made by Radford, William Brown Sr., who, with his son, William Brown Jr., conducts a feed store on McGee near Fourteenth street, bribed him for the privilege of taking hay from the warehouse whenever he pleased at the rate of \$2 a ton. Radford said that Mr. Brown had hauled away many loads of hay worth \$18 a ton. Radford carried a key to the warehouse, and in the early morning hours, he says, Brown would call with his wagon and carry away a load. Not long ago Mr. Gibbons began to suspect that something was wrong, and he notified the railroad police, who located the guilty parties, and arrested Radford, Evans Burgin and Frank Tytle. They were held for stealing a ton of hay on April 25. The charges against Mr. Brown

were withdrawn, the negroes confessing that their testimony was false.

There is considerable prejudice in some quarters against our wild prairie hay, says the Commercial of Winnipeg, though it has been shown that the native prairie hay is more nutritive than cultivated grasses. An analysis was recently made of wild Dakota prairie grass, compared with Wisconsin timothy, clover and millet. The two samples of prairie grass contained 53.16 and 53.19 per cent. of digestible substance, as compared with 49.96 for the timothy hay, 48.02 for the clover, and 48.53 for the millet. These tests would go to show the superiority of the native over the cultivated grasses for fodder. It will also help to explain why grazing animals will fatten more readily here in the West than in the Eastern provinces.

Shortages are queer things sometimes, but they often present a problem that is solvable nearer home than we think. A large shipper wrote to his commission firm that a good many of his shipments were running short about 1,000 pounds to the car. The commission firm could not explain the shortage, and advised the shipper to investigate. This was done, and the shipper found he had been paying for 1,000 pounds more per car than he received. If both shipper and receiver carry on an honest business on business methods shortages in such a commodity as hay should not occur. It takes pretty rough handling to make a shortage on properly baled hay. It may be set down as a general rule that a shortage means crooked or careless work.

HAY IMPORTS EXCEED EXPORTS.

According to the last report of the Bureau of Statistics hay aggregating 26,574 tons, valued at \$258,739, was imported in March, against 26,718 tons, valued at \$174,032, imported in March, 1895; and during the nine months ending March 24, 1896, valued at \$2,219,387, were imported, against 146,459 tons, valued at \$1,051,922, imported in the corresponding period of the previous season.

Of imported hay we exported none in March, 1896 or 1895, none during the nine months ending March, and 45 tons, valued at \$380, during the nine months ending March, 1895. Of domestic hay we exported 6,382 tons, valued at \$94,591, in March, against 3,930 tons, valued at \$56,910, exported in March, 1895; and during the nine months ending March we exported 42,860 tons, valued at \$639,088, against 36,814 tons, valued at \$516,330, exported during the corresponding period of the previous season.

REVIEW OF CHICAGO HAY MARKET.

The prices for hay ruling in the Chicago market during the last four weeks, according to the Trade Bulletin, were as follows:

During the week ending April 18 receipts of hay were 4,922 tons, against 5,362 tons the previous week; shipments 3,720 tons, against 4,144 tons for the previous week. Only a moderate business was transacted. The arrivals were rather light, but the demand was also restricted; local buyers were taking hold sparingly and merely supplying necessary wants. Shipping inquiry very light. The market ruled quiet but firm, and prices advanced 25¢ to 50 cents per ton.

During the week ending April 25, receipts were 4,769 tons, shipments 2,347 tons. The arrivals of timothy hay were light, and the local demand was quite good. Inquiry for shipment moderate. A firm feeling prevailed, but prices showed no particular change. The market for upland prairie ruled steady, the receipts were fair, and a moderate local demand existed. No material change to note in prices, though the scarcity of timothy hay gave strength to the market.

During the week ending May 2 receipts were 6,224 tons, shipments 3,155 tons. The market for timothy hay ruled steady. The offerings were only moderate and the local demand was fair. Shipping inquiry light. Prices unchanged, though the feeling was weak. Arrivals of upland prairie large. The demand was rather light, and the market ruled dull, with a slight decline in prices. Sales of choice timothy ranged at \$13.00@13.50; No. 1, \$12.00@13.00; No. 2, \$10.50@11.00; not graded, \$8.50@12.50; No. Grade, \$8.00; choice prairie, \$9.25@10.50; No. 1, \$8.50@9.00; No. 2, \$7.00@8.00; No. 3, \$7.00; No. 4, \$5.50@6.00. Rye straw sold at \$7.00@8.00; wheat straw at \$5.00, and oat straw at \$4.00@5.00.

During the week ending May 9 receipts were 5,487 tons, shipments 2,140 tons. The offerings of both timothy and upland prairie were large during the early part of the week. Only a moderate local inquiry existed and the market ruled dull. Very little demand for shipment. Prices ruled easier. Toward the close the demand became a little more active, and the arrivals fell off somewhat, especially of timothy hay. A firmer feeling prevailed, though prices show no advance. Sales of choice timothy ranged at \$13.00@13.50; No. 1, \$12.00@13.00; No. 2, \$10.50; No. 3, \$9.50; not graded, \$10.00; choice prairie, \$9.00@10.00; No. 1, \$8.00@9.00; No. 2, \$7.00@8.00; No. 3, \$7.00@7.50; No. 4, \$6.00; not graded, \$6.00.

Rye straw sold at \$7.00@7.50; wheat straw at \$5.00, and oat straw at \$5.00.

The EXCHANGES

The Kansas City Board of Trade has increased the membership fee from \$500 to \$1,000.

Tickets of membership to the New York Produce Exchange were recently quoted at \$250.

The Directors of the Chicago Board of Trade have issued an order that members must discontinue trading on the curb.

The New York Stock Exchange is following the action of the Produce Exchange in waging war against bucket shops.

The Chicago Board of Trade Directors have decreed that henceforth official weighmen shall not weigh grain at junction points.

The grain section of the Toronto Board of Trade, which was reorganized recently, is busily employed on amendments to the by-laws. A committee has taken steps to remedy the dishonest returns of stocks of grain stored in local elevators.

The report on the Gratuity Fund of the New York Produce Exchange for the year ending April 1 shows that for the 68 deaths occurring during the year, \$635,251 had been paid out. There was a loss to the surplus fund of \$156,070.40, reducing the total amount to \$700,606.68. In pursuance with recent changes in the by-laws \$24,550 of surplus earnings of the Exchange was added to the Fund.

The Baltimore Corn and Flour Exchange has changed its name to the Chamber of Commerce, in pursuance with an act of the Maryland Legislature. The object in view is the consolidation of the various Exchanges into a Bourse, or an organization of which the members of all the Exchanges so amalgamating will also be members. The smaller Exchanges will not necessarily lose their individuality by this combination. The fee for the transfer of membership on 'Change has been reduced from \$10 to \$1.

The Board of Directors of the St. Louis Merchants' Exchange are drawing close lines around their membership, evidently believing that it is better to keep a bucket shop man out than to have to put him out. They recently decreed that applicants must be vouched for as to character and worth as a member by those recommending them, and in addition the applicants will be compelled to answer a list of questions as to themselves and business. Among the questions is this: "Are you now, or have you ever been connected with any bucket shop?"

F. Kraus & Co.'s St. Paul Elevator "B" at Milwaukee, which was declared irregular last January, has been made regular again. Last December Kraus & Co. were called upon by Angus Smith to load into a vessel a large quantity of No. 2 wheat. Mr. Smith held warehouse receipts issued by Kraus & Co., calling for No. 2 wheat, but the latter firm attempted to deliver No. 2 Northern, which Mr. Smith promptly rejected and entered complaint against Kraus & Co. with the secretary of the Chamber of Commerce. The case was subsequently settled, however, and Mr. Smith withdrew his complaint. The directors then declared the house irregular, although Kraus & Co. claimed they had only misunderstood the rules. The rules now require a daily report to the Chamber of stock in regular elevators.

The cases of F. J. Harris and Francis Kennett, both of whom appealed to the courts to order the Chicago Board of Trade Directors to reinstate them as members, they having been suspended for alleged violations of the rules, were recently decided by Judge Windes. The court held that the Board of Trade must reinstate Harris, because in trying him the evidence of R. C. Gunning was read, the witness not being present. This, the court said, was a denial of Harris' right to cross-examine the witness, and therefore a mandamus was issued ordering the plaintiff's reinstatement. In Kennett's case no such error occurred, though the evidence upon which the two men were convicted by the Directors was practically the same. Kennett's petition for mandamus was denied and he filed notice of an appeal. The Board of Trade also filed notice of appeal in the Harris case.

Shippers now profess a high regard for the Interstate Commerce Law, and discourse volubly upon the benefits that are bound to follow the impartial administration of it; anyone who would now accept a less rate than is paid by another, is to be regarded as little better than a swindler. This sudden awakening of the commercial conscience will, no doubt, prove of much benefit, even though its source is directly traceable to the possible consequences growing out of the decision in the case referred to.

WATERWAYS

On April 28 the steamer Zenith City left Duluth with 230,000 bushels of oats.

The steamer Panther reached Erie April 14 with a cargo of grain from Toledo.

Navigation was opened at Superior, Wis., April 21, when the first vessel sailed.

The first boat out of Green Bay, Wis., this season left on April 22 with grain for Buffalo.

Navigation on the Sault Canal opened April 18, the first tugs going through on that date. The Canadian Canal opened May 7.

The steamer Samuel F. Hodge, laden with corn from South Chicago to Port Huron, sank in 14 feet of water in Alpena Harbor May 1. Nearly all the cargo was wet.

It is expected that by October 1 the Calumet River at South Chicago will possess a channel 20 feet deep from the harbor entrance to One Hundred and Tenth street, a distance of two miles.

Vessel tonnage for 10,000,000 bushels of wheat from the port of Duluth was chartered for May, which is claimed to be the largest on record for any port in the history of the grain trade.

Every grain vessel that arrived in Buffalo up to Saturday night, May 2, was unloaded that week. This makes a record for grain handling. During the week 8,200,000 bushels were unloaded.

The Great Northern elevators at Superior, Wis., recently loaded into vessels in one day 450,000 bushels of grain, breaking the best previous record at the head of the lakes by 125,000 bushels.

It was officially announced that the Welland Canal would be opened for navigation May 1, but vesselmen and shippers loudly complained of the late date set and the canal was opened April 28.

The record for the largest grain cargo was again broken on April 18, when 165,000 bushels of corn were loaded into the new steel barge Martha, at Bartlett, Frazier & Co.'s Calumet Elevator at South Chicago.

The sudden opening of navigation this year was a surprise to vesselmen. Buffalo was caught napping and unprepared for the opening that was announced by the arrival of the first vessel on the evening of April 19.

The South and West Grain and Trade Congress, which met at Charleston, S. C., April 29-30, adopted resolutions urging upon Congress the wisdom of building the Nicaragua Canal, and also improving the Mississippi River.

Steamer Geo. W. Morley, on her way from Chicago to Prescott, Ont., with 60,000 bushels of corn, struck a shoal near Wolfe Island May 1 and sprung a leak, but managed to make Clayton, N. Y., by keeping the pumps working.

Since the opening of navigation on the Red River of the North, steamers and barges have been hauling large quantities of wheat from up and down the river to Grand Forks, N. D., where it is being stored by the elevator companies.

The United States Consul at Manchester, England, reports that traffic on the Manchester Canal is constantly increasing, and that there are prospects of a more general and increased business from the United States direct to Manchester.

The Marine Record says that the ice at Buffalo this season did much to prove the feasibility of a dam at the foot of Lake Erie. The ice gorged at the head of Niagara River, and backed the water up so as to materially relieve the situation in Buffalo harbor.

The Canadian government has made the canal tolls the same as last season, viz.: On grain and other food products passing through the Welland Canal, 10 cents per ton, with free passage of St. Lawrence Canals; on the Sault Ste. Marie Canal, free to vessels of both countries.

The craze for new canal schemes seems to be in at least temporary abeyance, and the deepening and improvement of existing channels and harbors is now receiving due attention. It should have been realized long ago that nothing but vessels of the largest capacity would meet the requirements of the grain trade, and that waterways would have to accommodate this traffic.

Lake and rail rates on grain from Chicago and Milwaukee to Boston, local and New England rate points have been announced as follows: On corn, 9 cents per bushel, and on oats, 5½ cents per bushel, with the understanding that the Chicago lake line agents be authorized to adjust these through rates from time to time during the season in accordance with any material change in current lake rates to Buffalo. On ex-lake grain east of Buffalo in carloads not taken under the established through rates to New England points, the following rates are

made to Boston local and interior points, taking Boston rates: Wheat, 8 cents; corn and rye, 7½ cents; oats, 4 cents.

The new whaleback steamer which was recently launched at Superior, Wis., is one of the largest boats on the lakes, being 382 feet long. She will carry 135,000 bushels of wheat with a depth of 14½ feet of water at the Sault Canal, and if there were 20 feet of water would carry 220,000 bushels.

The total traffic on the United States Canal at Sault Ste. Marie during April amounted to 279,174 tons, against 13,898 tons in April, 1895. This amount included 1,109 bushels of grain and 269,012 barrels of flour. The canal opened this season April 18, last season April 25. The Canadian Canal was not open.

The Chicago grain fleet made a sudden and early move out of the harbor this season, the first vessel leaving on the night of April 14. Much difficulty was experienced in getting out of the Chicago River, and a blockade resulting from boats getting stuck in the mud was the cause of many of them losing considerable time.

The Cleveland Steel Canal Boat Co., which will this season have four canal steamers and fifteen barges in operation between Cleveland and New York, is said to have been a paying enterprise beyond any question. As the company is said to have already concluded engagements that will keep the fleet of 19 barges fully engaged next season, it will probably not be long until a contract is let for more boats. It ignores the Buffalo elevator pool and saves the extortionate charges.

In pursuance with the official order the Erie and Champlain Canals opened for navigation May 1. There was the usual boom in traffic incident to the opening of navigation, while the advance in rates on all commodities was due chiefly to the combination of boatowners. The opening rate was 3½ on wheat, Buffalo to New York. The railroads have fixed the rate at 5 cents per bushel. But the railroads will undoubtedly try to monopolize the trade this year just as they did last season.

The deepening of the Hudson River to 12 feet, as far as the State Dam, seven miles above Albany, will probably be completed within the next two years. The improvement projected and being carried out by the federal government calls for a channel 12 feet deep and 400 feet wide to the foot of Broadway, in Troy, and a channel 300 feet wide, of the same depth, to the State Dam, at the head of navigation. The contracts for this work, let in 1893, cover the removal of 4,620,000 cubic yards of earth, and 190,000 tons of rock, and the building of eight miles of dikes. The estimated cost is \$2,500,000.

The Winnipeg Board of Trade has forwarded to the Canadian Pacific R. R. Co. and other bodies a statement setting forth the condition of the Canadian lake marine, and protesting against that railroad discriminating between lines of steamers, whereby the ordinary local tariff is placed on all through freight received at Fort William from steamboat lines other than the C. P. R. or Beatty. It is pointed out that the fleet of Canadian vessels in the carrying trade on Lake Superior is totally inadequate for the transportation of grain, etc., of Manitoba and the territories, and that the discrimination would make a still greater quantity be exported via United States ports.

Henry T. Niles of Toledo, Ohio, calls attention in the Toledo Bee to that port's need of an improved harbor and a channel of sufficient depth to enable the commerce of the lakes to reach the docks. Toledo now has only a "16-foot ditch," and it is suggested that upon the completion of the 20-foot channel from Chicago to Buffalo the commerce that Toledo has lost will only be seen with a spy glass as it floats by. This will be the effect of the 20-foot channel on ports not accessible to it, as the tonnage of the grain carriers, which has steadily grown, will then be further increased. As Mr. Niles says, this fact should have been realized long ago, and he urges aggressive action before they are compelled to suffer the consequences of their neglect.

The parents of Ed. Smith, who was killed by falling from the roof of the Union Elevator at Kansas City last June, are suing the Union Elevator Co. of that city for \$5,000. Young Smith, who was 19 years old, was painting the roof when he fell, and the plaintiffs claim that the company should not have put a boy to work in such a dangerous place.

Minimum carload weights of grain is the latest subject to receive the attention of the managers of the Joint Traffic Association. They recommend that railroad carriers within the territory of the Association require shippers of grain from points on their several lines to load all cars ordered by them for grain shipments to within 10 per cent. of their marked capacities, and that in no instance shall the minimum weight be less than 24,000 pounds.

OBITUARY

D. P. McLaurin, who was formerly engaged in the grain business at Brandon, Man., died recently.

Philip Heppner, who operated a grain warehouse at Arlington, Ore., where he bought grain, died recently.

Edgar Gillet, formerly of the firm of Edgar Gillet & Bro., grain dealers of Baltimore, Md., died recently.

L. Frensdorf, of the firm of L. Frensdorf & Son, dealers in grain and wool at Hudson, Mich., died recently.

Peter McIntire, an employe of the Boston Elevator Company, died suddenly at Providence, R. I., April 14.

Charles Davis, a prominent citizen of Binghamton, N. Y., and who carried on a baled hay business, died April 14.

W. D. Rhea, of the firm of B. S. Rhea & Son, dealers in grain, etc., at Nashville, Tenn., died recently after a short illness.

Duncan C. Ralston, formerly a member of the grain firm of Arch, Baxter & Co. of New York City, died recently at the age of 67 years.

W. A. Holcomb, president of the Toledo Produce Exchange, died recently. He was a faithful officer of the Exchange, and a business man esteemed by all who knew him.

Captain Isaac T. Morris, one of the oldest members of the Chicago Board of Trade, died suddenly May 12. Mr. Morris had been known in grain trade circles for over 30 years.

Capt. Dennis P. Slattery of St. Louis, Mo., who was probably one of the best known men in the Mississippi Valley, was drowned on the morning of April 20, while out fishing, and it is thought by some that he committed suicide. Mr. Slattery had dealt in grain for more than 20 years, and was for a long time president of the United Elevator Co.

S. S. Linton, a well-known grain dealer of Minneapolis, died April 16, at Eureka Springs, Ark., whither he had gone for his health. Mr. Linton went to Minneapolis about 14 years ago, from Ohio, and a year later went into the grain commission business, the firm being Mills & Linton. It was one of the pioneer grain firms of the city. Twelve years ago the present firm of S. S. Linton & Co. was organized, with W. D. Gregory as Mr. Linton's partner.

Adolph Seckel, head of the firm of E. Seckel & Co., grain commission merchants of Chicago, died on April 16. Mr. Seckel was born in 1856. The house of which he was a member was founded many years ago by his father, E. Seckel, long since deceased. The original firm name, however, has always been retained, and the business was conducted by the two sons, Adolph and Albert. Mr. Seckel served three years on the directory of the Board of Trade, and was highly esteemed by the members.

William S. Johnson, manager of the Kansas City branch of Charles Counselman & Co. of Chicago, died April 22 at Englewood, Ill. The news was a surprise to his late associates, as he was thought to be recovering from a recent sickness contracted in a 25-mile drive through a snow storm in Nebraska. Mr. Johnson was 28 years old and went to Kansas City when the Counselman Company established their office there five years ago. He was a Mason and a member of the Kansas City Club. A wife and two children survive him.

OUR CALLERS

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

- H. A. Koste, Platte City, Mo.
- J. Silas Lens, of the Barnard & Leas Mfg. Co., Moline, Ill.
- B. F. Ryer, secretary of The Huntley Mfg. Co., Silver Creek, N. Y.
- F. L. Cranson, representing The S. Howes Co., Silver Creek, N. Y.
- M. L. Barbeau, secretary of The S. Howes Co., Silver Creek, N. Y.
- G. M. Robinson, president Charter Gas Engine Co. of Sterling, Ill.
- Henry Stanley, of the Todds & Stanley Mill Furnishing Co., St. Louis, Mo.
- E. B. Hetzell, representative of The J. B. Allfree Mfg. Co., Indianapolis, Ind.
- C. N. Howes, president of The Howes Grain Cleaner Co., Silver Creek, N. Y.

The Grain Dealers' Association of Southwestern Iowa and Northwestern Missouri will meet at Council Bluffs on the evening of June 16.

RICE IMPORTS AND EXPORTS.

According to the last report of the Bureau of Statistics rice aggregating 770,000 pounds, valued at \$26,737, was imported in March free of duty under reciprocity treaty with Hawaiian Islands, against 404,000 pounds, valued at \$17,330, imported in March, 1895; and during the nine months ending March 4,345,500 pounds, valued at \$152,250, were imported, against 4,712,087 pounds, valued at \$209,140, imported in the corresponding nine months of 1894-95. Of rice imported free of duty none was exported in March, 1896 or 1895, or in the nine months ending March, 1896 or 1895.

Dutiable rice amounting to 13,231,845 pounds, valued at \$187,552, was imported in March, against 23,505,549 pounds, valued at \$334,795, imported in March, 1895; and during the nine months ending March 57,741,018 pounds, valued at \$858,146, was imported, against 101,089,172 pounds, valued at \$1,609,441, imported in the corresponding nine months of 1894-95.

Of dutiable rice we exported 717,306 pounds, valued at \$9,694, in March, against 1,049,112 pounds, valued at \$16,891, in March, 1895; and during the nine months ending March we exported 10,448,543 pounds, valued at \$154,993, against 7,024,736 pounds, valued at \$111,279, exported in the corresponding nine months of 1894-95.

Rice flour, rice meal and broken rice amounting to 5,362,246 pounds, valued at \$70,355, were imported in March, against 6,089,770 pounds, valued at \$82,401, imported in March, 1895; and importations during the nine months ending March amounted to 53,363,939 pounds, valued at \$709,905, against 52,371,926 pounds, valued at \$740,734, in the corresponding nine months of 1894-95.

Of imported rice flour, rice meal and broken rice we exported none in March, 1896 or 1895, none in the nine months ending March, 1896, and 987 pounds, valued at \$14, were exported in the nine months ending March, 1895.

F. F. Cole, grain broker of Toronto, Canada, recently brought suit against R. P. Blake, grain dealer of Ottawa, for \$1,067, a balance claimed to be due for the sale of 3,000 bushels of wheat.



[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

SECOND-HAND GASOLINE ENGINE.

A second-hand Lewis Gasoline Engine for sale. Five actual horse power. Everything complete and in perfect order. Address

BAY CITY GRAIN CO., Bay City, Mich.

GAS ENGINE CHEAP.

One good second-hand 35-horse power Raymond Gas Engine for sale. Run only one year; in first-class condition. Correspondence solicited. Address

McCRAE & MORRISON, Kentland, Ind.

TRACK SCALE.

For sale, very cheap, a 34-foot Foresythe pattern track scale of 60,000 pounds' capacity. The two wooden track beams are new. For price and further information address

I. K. HOSTETTER, Osborn, Ohio.

NEBRASKA ELEVATOR FOR SALE.

A horse power elevator of 8,000 bushels' capacity, located in county seat in good grain country, for sale. One other elevator. Town of 1,600 inhabitants. Fine crop prospects. Price \$800, much less than cost. Good reason for selling. Address

O. H. LUMRY, Fullerton, Neb.

GRAIN ELEVATOR FOR SALE.

Steam power grain elevator, on Chicago & Alton Railroad, in Missouri, for sale. Convenient to Chicago, St. Louis and Kansas City. Corn sheller, scales, office, etc., complete. Splendid grain country; finest corn crop this season ever known. Very healthy location. Now in operation and rented to good advantage. Address

ELEVATOR, Mt. Leonard, Mo.

IOWA MILLS AND ELEVATORS.

The administrators of the estate of J. J. Wilson, deceased, offer for sale the new Daisy Roller Mills, located at Algona, Iowa, capacity 125 barrels. New throughout one year ago. Steam power, steam heat. Up to date in every particular. Good exchange business and local trade for mill products. With this plant are elevators of 40,000 bushels' capacity, stock yards, line of coal sheds and three houses for employes. Also the Model Roller Mills located at Emmetsburg, Iowa, capacity 150 barrels. Steam power, steam heat. Large local and shipping trade fully established. No near competition. These properties are located in a good wheat section; shipping facilities from both Algona and Emmetsburg are unsurpassed. To close up the affairs of the estate either one or both of these properties will be sold at a great sacrifice. For particulars address

LENETTE W. BUTLER, administrator, Algona, Iowa.



[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

ELEVATOR WANTED.

I want to buy or rent for a term of years, a grain elevator in Illinois or Iowa. Give full particulars. Address

A. TOLMAN JR., Bishop Hill, Ill.

WILL TRADE KANSAS LAND FOR ELEVATOR.

I want to trade 160 acres of good land in Butler County, Kansas, for a good grain elevator in Illinois. Address

LOCK BOX 28, Emden, Ill.

POSITION AS SUPERINTENDENT WANTED.

Position wanted as superintendent or foreman of grain elevator, either large or small house. Have had ample experience and can furnish good references. Address

SUPERINTENDENT OR FOREMAN, care "American Elevator and Grain Trade," Chicago, Ill.

IOWA ELEVATOR WANTED.

I want to lease a good elevator supported by a good grain trade in good town in Western Iowa. Business must be from 300 to 400 cars. Competition reasonable. Address

J. F. BLUE, Van Horne, Iowa.

POSITION WANTED.

I want a situation as foreman or manager in a grain elevator. Have had several years' experience in the handling, grading and mixing of grain and the running of elevator machinery. I understand bookkeeping and all the details pertaining to the business. First-class references. Address

B. J., care "American Elevator and Grain Trade," Chicago, Ill.

ELEVATOR FOR RENT.

Elevator in the best grain region of Illinois for rent. The best built and most complete house in this part of the state. Has ear corn and shelled grain dumps, office, scales, hopper scales, one run of French burrs, sheller and cleaner, 30-horse power engine, etc. Must be seen to be appreciated. Possession given June 1, 1896. Elevator located on the C., C. & St. L. R. R. Address

GEO. W. RICHNER, Mansfield, Platt Co., Ill.

E. R. Ulrich & Son,

SHIPPERS OF
WESTERN GRAIN,
ESPECIALLY
High Grade White and Yellow Corn.

Elevators through Central Illinois on Wabash Ry., Chicago & Alton Ry., C. P. & St. L. Ry., and St. L., C. & St. P. Ry.

Main Office, 6th Floor, Illinois National Bank Building,
SPRINGFIELD, ILLINOIS.

Write for Prices Delivered.

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Best Grades

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TO MILES & COMPANY,

MINE AGENTS AND SHIPPERS.

PEORIA, ILL.

To POULTRY RAISERS.

The Complete Poultry Manual is a neat little work which is well worth reading by those interested in poultry, or by boys or girls who want to turn an honest penny. The price is only 25 cents. Sent postpaid on receipt of price. Address

MITCHELL BROS. CO.,

184 Dearborn Street, Chicago, Ill.

GAS ENGINE LITIGATION.

NOTICE OF SUIT AGAINST INFRINGERS.

We think it fair to you, as well as to ourselves, to advise you that we are informed by our counsel, Messrs. Baldwin, Davidson & Wight of Washington and New York, that the electrical igniter on the gas and gasoline engines of the New Era Iron Works Company is an infringement of Letters Patent of the United States No. 525,828, granted Sept. 11, 1894, to Mr. Paul A. N. Winand, and of which we are the owners. We have brought suit in the Southern District of Ohio against the New Era Iron Works Company, and propose to protect our rights against all makers and sellers or users of engines having upon them igniters covered by such Letters Patent.

Yours truly,

THE OTTO GAS ENGINE WORKS.

33d and Walnut Streets,

Philadelphia, Pa.

ROOFING AND SIDING.

JAMES A. MILLER & BRO.

129 and 131 South Clinton Street, CHICAGO.

Corrugated Iron Roofing and Siding

Material Only or put on Complete.

Special pains are taken to get out these materials so they can be cheaply put on and make a good job.



DURABLE—EASILY APPLIED.

This roofing is manufactured from natural Trinidad asphalt materials, and will not dry up and become brittle under exposure to the weather as coal tar roofings do. Send for free sample of roof 12 years old, with circular and price list to

WARREN CHEMICAL & MFG. CO.,
56 Fulton St., New York, U. S. A.

Gutta Percha Roofing.

Absolutely fireproof paper sheathing—particularly adapted for elevators. Send for illustrated catalogue.

EMPIRE PAINT & ROOFING CO., 221 N. 4th St., Philadelphia, Pa.

Wire Edge. Lock Joint.

For Flour, Grist Mills and Elevators.

VERMIN PROOF.

JENNINGS' Telegraph Cipher and Directory,

Modern, Practical, Economical and Instructive.

The principal Flour, Grain and Feed Shippers are using this cipher. It has no equal. Send for partial list of users. Price, \$3.00. Address Henry Jennings, 613 Chamber of Commerce, Boston, Mass.

COMMISSION CARDS.

[We will not knowingly publish the advertisement of a bucket-shop keeper or irresponsible dealer.]

E. P. MUELLER,

Shipper of Wet Feed,

From Chicago, Milwaukee and La Crosse.

Particular attention paid to the shipments of mixed car lots.

860 Calumet Bldg., 189 La Salle St., CHICAGO.

Will pay the highest prices for Wet and Dried Brewers' Grains, Dried Distillers' Slops, Starch Feed, Damaged Wheat, Hominy Feed and Barley Sprouts under yearly contracts. Write for estimates F. O. B. cars your city.

H. B. SHANKS.

Established 1873.

S. H. PHILLIPS.

Shanks, Phillips & Co.,

COMMISSION MERCHANTS,

HAY, CORN, OATS, BRAN, CHOPS, FLOUR AND CORN MEAL.

306 Front St., Memphis, Tenn.

Refer to Union and Planters' Bank. Cash advances on B. of L.

COLLINS & Co.,

STRICTLY COMMISSION

Grain, Hay and Mill Feed.

CINCINNATI, OHIO.



F. H. PEAVEY & CO.,

Minneapolis,

GRAIN RECEIVERS.

Consignments Solicited.

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MILLING WHEAT A SPECIALTY.

B. WARREN.

B. WARREN JR.

WARREN & CO.,

Grain Commission Merchants,

ROOMS 7 AND 9 CHAMBER OF COMMERCE,

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Established 1868.

S. W. FLOWER & CO.,

GRAIN AND SEED
MERCHANTS. . . .

TOLEDO, - - OHIO.

High grades of Clover, Alsike and Timothy Seed a Specialty.

If you want to buy, sell or consign, please correspond with us.

SHIP YOUR GRAIN

—TO—

P. B. & C. C. MILES,

COMMISSION MERCHANTS,
PEORIA, ILL.

Established 1875.

LIBERAL ADVANCES
QUICK RETURNS.

REFERENCES:—Commercial Nat. Bank, Peoria Savings, Loan & Trust Co., Peoria.

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WHEAT, CORN, OATS, BRAN, MIDDINGS, SCREENINGS, HAY
SEEDS, BEANS, PEAS AND CORN GOODS.

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J. F. ZAHM.

F. W. JAEGER.

F. MAYER.

ESTABLISHED 1879.

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J. F. ZAHM & CO.,

Grain and Seeds,

TOLEDO, - - - OHIO.

Send for our "RED LETTER." It'll keep you posted.

Martin D. Stevers & Co.

Commission Merchants,

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We make a specialty of selling by sample

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Grain, Seeds and Provisions for future delivery
bought and sold on margins.

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1863.

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MERCHANTS,

GRAIN, Flour, Seed, Hay and Straw.

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Liberal advances made on consignments. Market reports furnished gratuitously on application. Correspondence solicited.

References: { Corn Exchange National Bank.
Manufacturers National Bank.
Merchants National Bank.

ACCOUNTS OF GRAIN DEALERS

OR ORDERS FOR

Speculative Investments

On the CHICAGO BOARD OF TRADE SOLICITED.

Call at our office or write for private Cipher Code or Shippers Grain Record.

MCLAIN BROS. & CO.,

RIALTO BUILDING, CHICAGO.

W. F. JOHNSON.

F. J. SCHUELER

W. F. JOHNSON & CO.,

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Room 59 Board of Trade, CHICAGO.

Rooms 406-408 Corn Exchange, MINNEAPOLIS.

Room 317 Chamber of Commerce, ST. LOUIS.

Room 23 Chamber of Commerce, MILWAUKEE.

Address all Correspondence to and make all Drafts on Chicago.

ESTABLISHED 1879.

LEDERER BROS.,

GRAIN and SEED

Commission Merchants,

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We give careful attention to every shipment, are always prepared to make cash advances on consignments. We make a specialty of handling spot goods, which we either sell after arrival or hold if requested. We solicit your trade as we do a strictly commission business. REFERENCES: Merchants National Bank, Baltimore, Md., and the Commercial Agencies.

COMMISSION CARDS.

D. G. Stewart,

GRAIN AND COMMISSION

Proprietor IRON CITY GRAIN ELEVATORS.

Capacity, 300,000 Bushels.

LIBERAL ADVANCES ON ALL CONSIGNMENTS.

CORRESPONDENCE SOLICITED.

OFFICE, 1019 Liberty Street, - PITTSBURGH, PA

ESTABLISHED 1871.

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S. W. Edwards & Son,

ESTABLISHED 1870.

HAY, GRAIN AND FEED,
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Office and Warehouse,
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REFERENCES: { Union National Bank, Chicago, and
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We are members of the Board of Trade and have salesmen at the principal railroad yards.

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O. Z. BARTLETT.

L. Bartlett & Son,

GRAIN AND PRODUCE
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BARLEY A SPECIALTY.

Room 23 Chamber of Commerce Bldg.
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Careful attention given to orders from Brewers, Maltsters and Millers.

GEO. N. REINHARDT & CO.,

MELROSE STATION, NEW YORK CITY.



We sell on Commission and buy direct,

HAY, GRAIN AND FEED.

Storage capacity 8,000 bales, 30,000 bushels.
Let us know what you have to offer.

The Bristol Counter



Registers an accurate account of work done on any machine, grain tallies, fraction tallies, 4, 5 and 6 figures. Send for circular.

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DUST! DUST!



Gibbs' Patent Dust Protector protects the nose and mouth from inhalations of poisonous dust; invaluable in mills, elevators and every industry where dust is troublesome. Perfect protection with perfect ventilation. Nickel-plated protectors \$1, postpaid. Circulars free. Agents wanted.

Gibbs Respirator Co.,
30-36 La Salle Street, - CHICAGO.



J. B. DUTTON'S Patent Automatic Grain Scale.

FOR USE IN

ELEVATORS, DISTILLERIES, MALT HOUSES, FLOUR MILLS, ETC.

ACCURATE AND RELIABLE AT ALL TIMES. SCALES SENT ON 30 DAYS' TRIAL.

SEND FOR CIRCULAR AND PRICE LIST.

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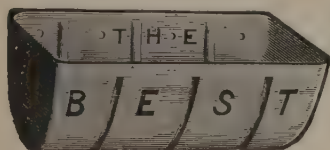
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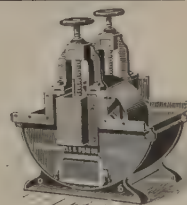
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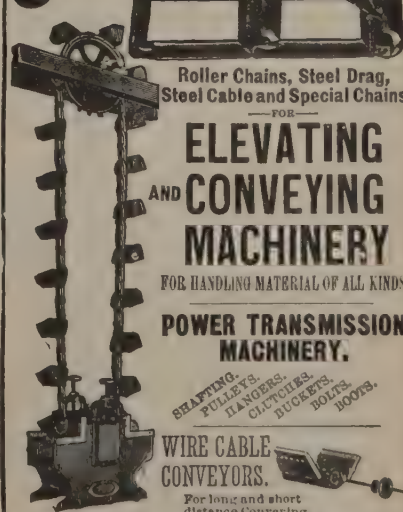


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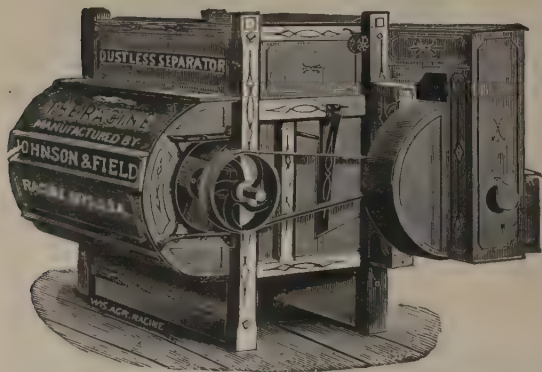
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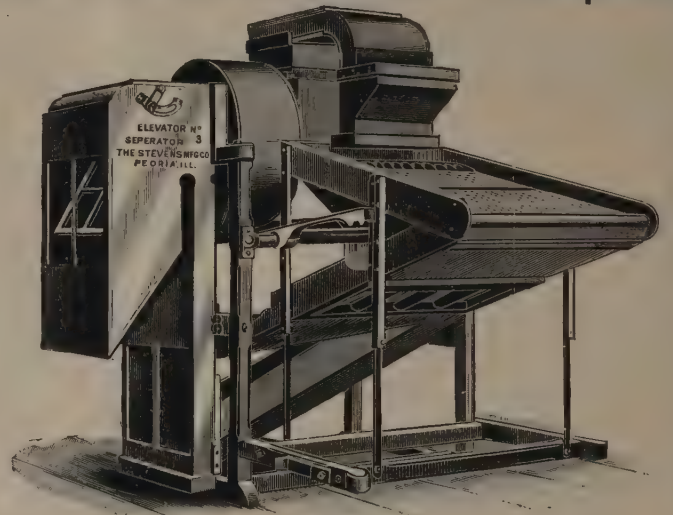
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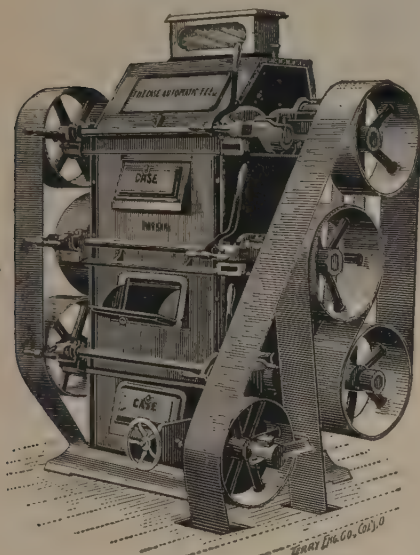
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Who put in a **ROLLER FEED MILL** last season, found it a profitable investment. Some Roller Feed Mills put in by elevator men have more than paid for themselves in one season. The demand for ground feed during the coming season promises to be even greater than during the last.

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Are made in four sizes, and always do perfect work.



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She is a daisy. We have smiles all over our faces like a full moon. Now, if you want a statement regarding the roll, let me know, and will write you a good one. Everything all O. K.
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This is an entirely new and complete system for handling, treating and storing grain, seeds, millstuff, coal, sand, gravel, salt and other subdivided substances which can be handled in bulk, and the protection and preservation of cereals, seeds, vegetables, fruits, ensilage and fodder crops, cotton, wool and other fibers, tobacco, provisions and all perishable substances and valuable commodities in absolute safety from fire, water, air, storms, floods, microbes, insects, vermin, animals, thieves, evaporation, fermentation, oxidation or other causes of damage or destruction.

This system has nothing in common with other methods, but is entirely different and distinct, in construction, arrangement and operation, materials used, principles involved, and results obtained, from all others heretofore in use.

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It was on exhibition at the World's Columbian Exposition of 1893, and was awarded four highest medals and diplomas and received in addition thereto the highest indorsement of the principal officers of the Exposition as well as of the highest authorities in all industries to which it is applicable.

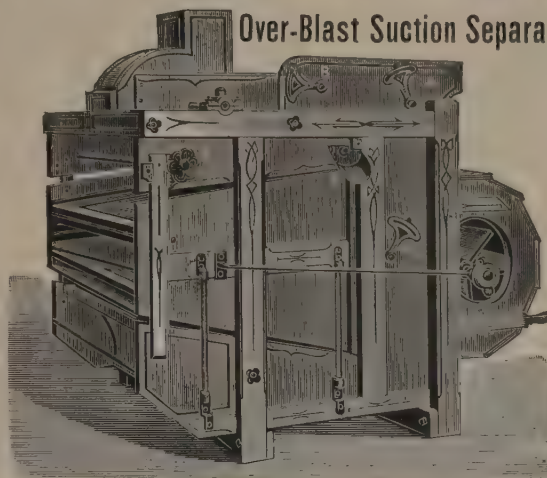
The title to all patents and other rights belonging to this system is vested in The Smith Pneumatic Transfer & Storage Co., and any infringement thereon will receive prompt attention.

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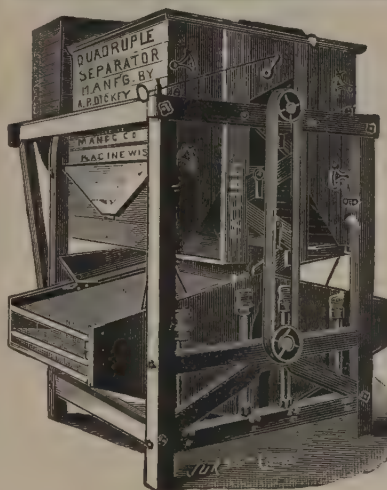
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**"Grain
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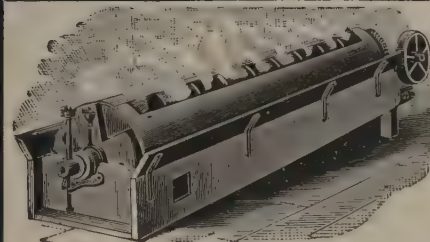
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The Quadruple Suction Dustless Separator, Four separate suctions, independent of each other, with sieves and screens, requiring less power, less floor space, lower in height, needing less bracing, has better and more perfect separations, and furnished with the only perfect force feed and mixer on the market. Guaranteed to clean Grain to any desired standard without waste once through this machine twice as well as any machine made.

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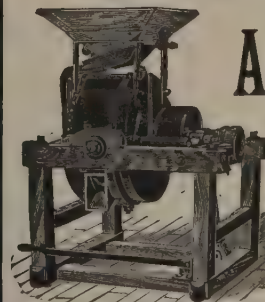


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For Cornmeal, Hominy, Buckwheat, Rice, and all kinds of Cereal Products; also Sand and Coal dust, etc.

Drying Cylinder made entirely of iron. The machine has few parts and is not liable to get out of order. Automatic in its operation, requiring no attention. Double the capacity of any other Dryer sold for same price.

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Comprises all Recent Improvements for Producing Goods at Lowest Cost.

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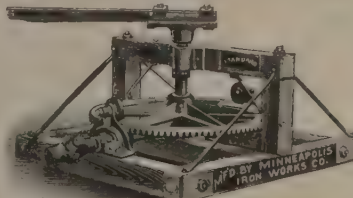
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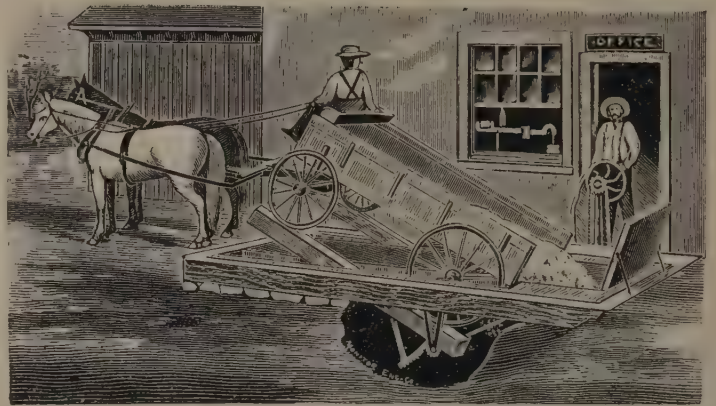
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GENTLEMEN:—Your favor of the 28th ult. received and noted. Last July I put one of your Controllable Wagon Dumps in a Fairbanks, Morse & Co.'s 22-ft. scale, and it has given me entire satisfaction in every respect. In this locality the bulk of grain is as yet handled in sacks, and by tipping the Dump about one-half it makes a nice slant, making it very easy to pull the sacks to back end of wagon, where strings are cut and grain runs out into bin below. Every farmer, without exception, speaks in glowing terms of the merits of this Dump. In unloading loose grain from wagon there is no dump that will equal yours in being easily handled and always under control of operator. No searing horses, no dropping of wagon and no noise. I consider a grain elevator incomplete without the Savage & Love Controllable Wagon Dumps.

Yours truly,
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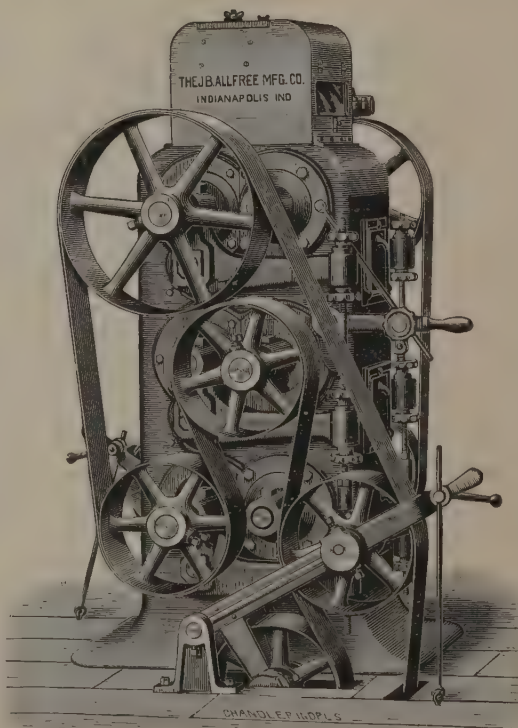
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Makes Better Flour, Saves Power,
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The official lists of the grain dealers, shippers, flouring mills, elevators and commission houses of any one of the twenty-seven of the principal cities is ALONE WORTH MANY TIMES THIS SMALL OUTLAY, and this is the only work which contains these lists, and they are correct and revised to date, besides the thousands and thousands of places all over the country wherever grain is bought or sold.

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Cotton Compress Warehouse, 108 x 310 feet, for the New Orleans & Western R. R. Co., Port Chalmette, La.
Freight Station for the Baltimore & Ohio Southwestern R'y Co., Brighton, Cincinnati, Ohio.

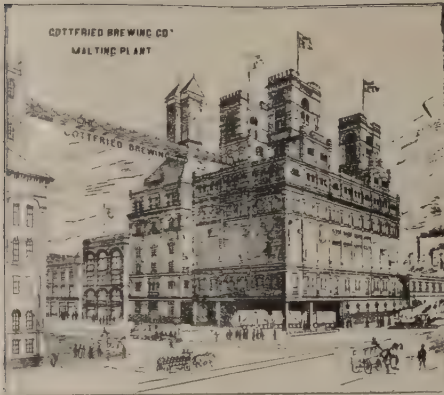
RIVER AND HARBOR:

Dock and Warehouse, 225 x 1,500 feet for the New Orleans & Western R. R. Co., Port Chalmette, La.

MISCELLANEOUS:

85,000 Spindle Mill, for the Berkshire Cotton Mfg. Co., North Adams, Mass.
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10,000-bushel Distillery, the largest in the world, for the Indiana Distilling Co., Terre Haute, Ind.
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Six-story Office Building, for J. W. Warner, Syracuse, N. Y.
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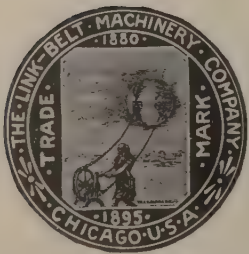
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Mash-Tub Valves.

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Grain Belt Tripper.

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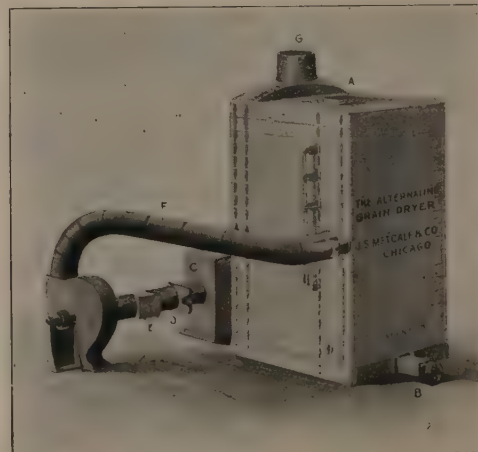
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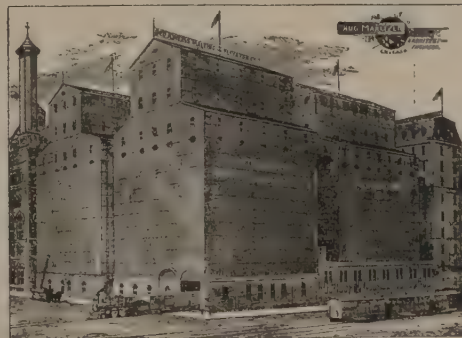
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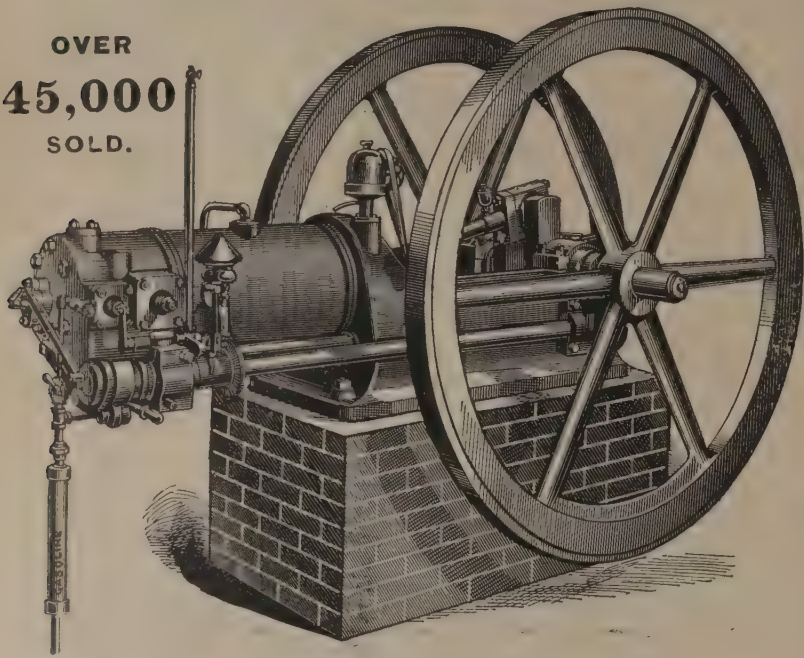
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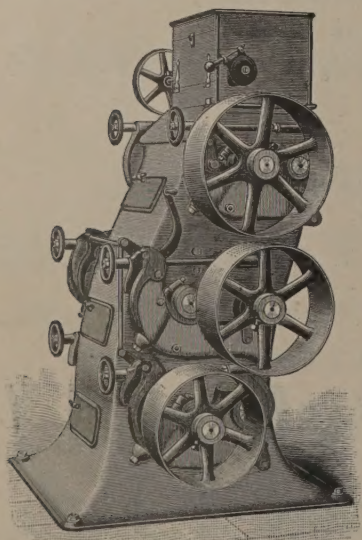
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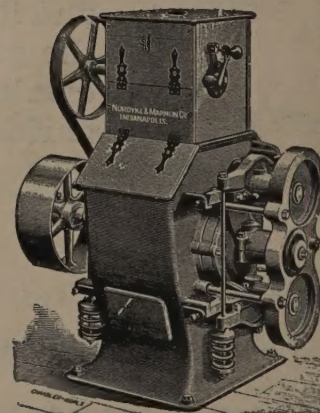


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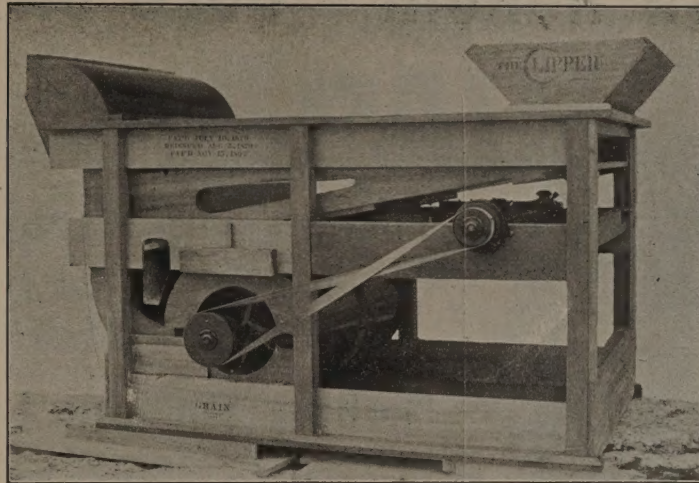
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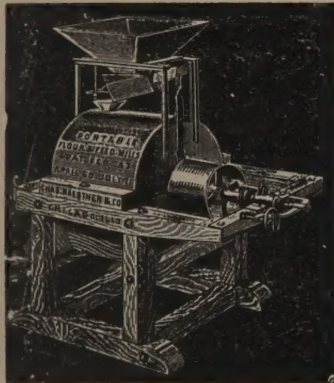
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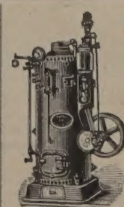
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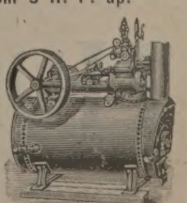
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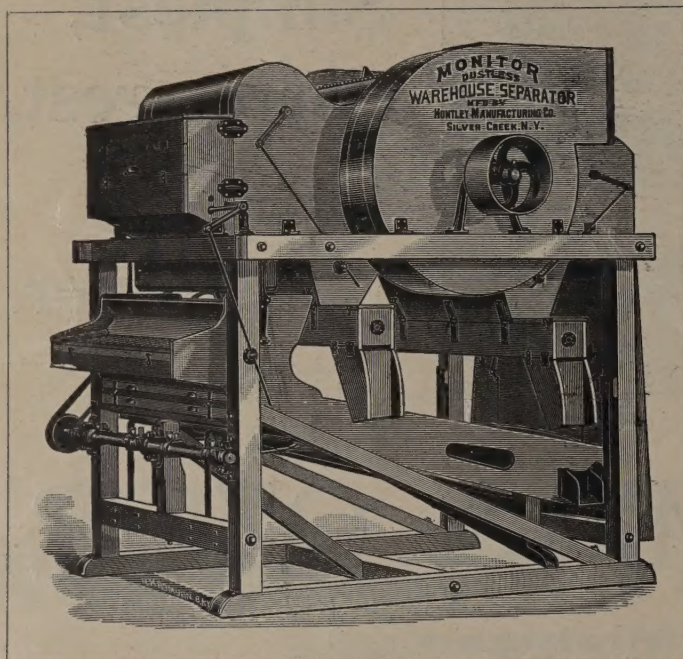
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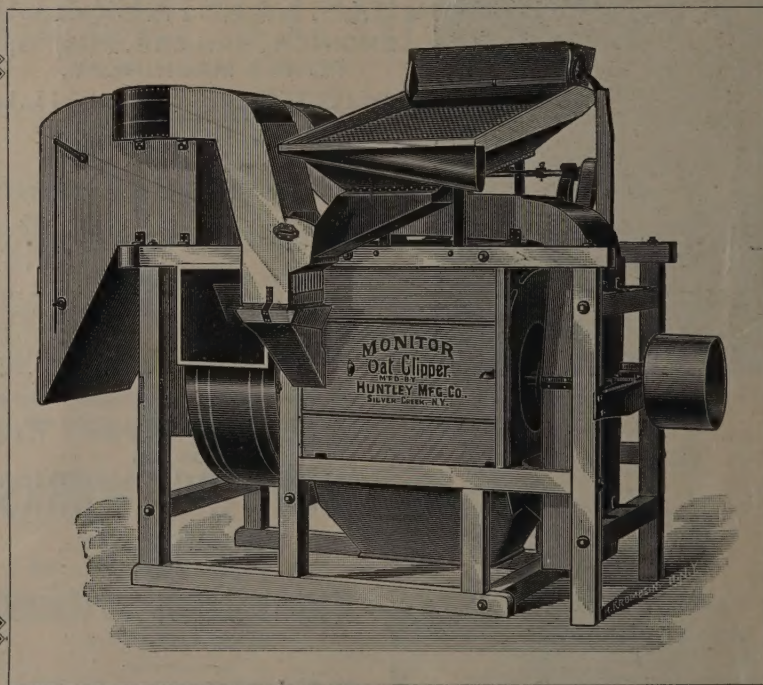
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